Appendix

Long Beach Comprehensive Plan Update, 2026

Adopted August 11, 2008, effective August 25, 2008

The City of Long Beach 115 Bolstad Avenue West P. O. Box 310 Long Beach WA 98631 (360) 642 4421



Table of Contents

A.	Ma	ıps		A-1
		A-1	Annexation Update	A-3
		A-2	Transportation Plan	A-5
		A-3	Development Parameters Map	A-7
		A-4	Parks and Open Space Plan	A-9
B.	Ind	licator	rs	B-1
C.	Co	mmun	ity Involvement	C-1
		1.1	Public Meeting (July 5, 2006)	C-1
		1.2	Public Meeting (August 1, 2006)	C-3
		1.3	Public Meeting (September 14, 2006)	C-6
		1.4	Public Meeting (September 27, 2006)	C-8
		1.5	Community Workshop (October 25, 2006)	C-11
		1.6	Community Workshop (November 8, 2006)	C-22
		1.7	Community Workshop (February 6, 2007)	C-25
D.	Ur	ban Fo	orm Alternatives	D-1
	1.	Green	n Links	D-1
	2.	Ocea	n View	D-2
	3.	Heart	t of the Peninsula	D-3
E.	Exi	isting	Conditions (2006)	E-1
	1.	Urba	n Form	E-1
		1.1	Natural Buffer	E-1
		1.2	North-South Alignment	E-2
		1.3	Small City Grid	E-2
		1.4	Building Form and Distribution	E-2
		1.5	Village Character	E-3
	_	1.6	Summary	E-3
	2.		ing Land Use	E-4
		2.1	Population Trends	E-4
		2.2 2.3	Land Use Trends	E-4
		2.3	Relationship of Use to Zoning Residential Land Use Trends	E-7 E-9
		2.5	Commercial	E-9
		2.6	Light Industrial/Intense Commercial	E-9 E-9
		2.7	Institutional/Public	E-9
		2.8	Vacant Land	E-10
		2.9	Rights-of-Way	E-10
		2.10	Density Distribution	E-10
		2.11	Summary of Issues	E-11
	3.	Hous		E-12
		3.1	Owner Occupied Units	E-12
		3.2	Housing Values	E-12
		3.3	Housing Market	E-12
		3.4	Household Incomes and Suitability of Housing Product	E-14
		3.5	Summary of Issues	E-16

4.	Envii	ronment	E-17
	4.1	Topography	E-17
	4.2	Climate	E-17
	4.3	Wind Characteristics	E-17
	4.4	Critical Area Ordinance Update Critical Areas Ordinance (CAO) Update	E-19
	4.5	Shoreline Master Program (SMP) Update	E-25
	4.6	Groundwater Level	E-31
	4.7	Soil and Geology	E-32
	4.8	Noise Pollution	E-33
	4.9	Light Pollution	E-33
	4.10	Summary of Issues	E-33
5.		s, Open Space and Recreation	E-35
	5.1	Community Context	E-35
	5.2	Historic Perspective	E-36
	5.3	Physical Development Pattern	E-37
	5.4	Existing Parks and Recreation Resources	E-37
	5.5	Community Needs and Visioning	E-42
	5.6	View Protection In Long Beach	E-43
	5.7	Cultural Heritage Planning for Long Beach	E-44
	5.8	Summary	E-44
6.	Mark	et Overview	E-45
	6.1	Growth in the Region	E-45
	6.2	Income	E-46
	6.3	Office Market	E-47
	6.4	Retail Market	E-49
	6.5	Resort Market	E-51
	6.6	Summary of Issues	E-51
7.	Trans	sportation	E-52
	7.1	Street Network	E-52
	7.2	Traffic Volumes	E-58
	7.3	Traffic Operations	E-58
	7.4	4. Public Transportation	E-62
	7.5	Non-Motorized Transportation	E-63
	7.6	Summary of Issues	E-65
8.	Capit	al Facilities	E-66
	8.1	Fire	E-66
	8.2	Law Enforcement	E-66
	8.3	Education	E-67
	8.4	Medical and Emergency Facilities	E-67
	8.5	Library	E-68
	8.6	City Hall and Community Meeting Space	E-68
	8.7	Public Restrooms	E-68
	8.8	Public Parks	E-68
	8.9	Sewer System	E-68
	8.10	Water System	E-76
	8.11	Stormwater Management	E-89
	8.12	Summary of Issues	E-94
9.	Utilit		E-95
	9.1	Power Supply	E-95
	9.2	Telecommunications	E-96
	9.3	Solid Waste	E-96
	9.4	Summary of Issues	E-96

F.	Pacific County Comprehensive Plan	F-1
G.	Green Street Cross Sections	G-1
Н.	SEPA Review	H-1
I.	Implementation Strategies	I-1
J.	Reference Tables	J-1
K.	Glossary	K-1
L.	List of Figures	L-1

A. Maps

Map A-1: Annexation Update

Map A-2: Transportation Plan

Map A-3: Development Parameters Map

Map A-4: Parks and Open Space Plan



PAGE **A-4**LONG BEACH COMPREHENSIVE PLAN UPDATE 2026 APPENDIX

AUGUST 2008



PAGE **A-6**LONG BEACH COMPREHENSIVE PLAN UPDATE 2026 APPENDIX
AUGUST 2008

PAGE **A-8**LONG BEACH COMPREHENSIVE PLAN UPDATE 2026 APPENDIX
AUGUST 2008

PAGE **A-10**LONG BEACH COMPREHENSIVE PLAN UPDATE 2026 APPENDIX
AUGUST 2008

B. Indicators

At the July 28, 2007 Fort Columbia Retreat, participants were asked to nominate the Goals from the Comprehensive Plan that they believed to be most important to the city's future. These selected goals and associated actions are listed below. These will be tracked during the course of the Comprehensive Plan period. Each goal is associated with indicators that measure the many outcomes one would expect from the successful implementation of each goal. To assess how well each indicator is performing, it is linked to a desired target. Should the City reach any of the targets during the 20-year plan period, the City could raise the target level for more stringent outcomes. The indicators were selected for ease of gathering relevant data. Suggested tools or sources for gathering the data are also offered for each indicator. The schedule for gathering and updating this information is set at the discretion of City Staff or Elected Officials.

GOA	L	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE	ACTIONS
1-1	Foster the image of Long Beach as a unique, distinctive and attractive place to live, work and	Percentage of tourists that would return within 2 years	60%	ON-LINE (AND/OR) PAPER SURVEY	1-1-a Continue to emphasize design quality, especially for building street frontages, in the review of residential, commercial and resort buildings in the city, in order to reinforce Long Beach's early seashore theme.
	visit.	Percentage of owner-occupied homes sold not due to death or injury	30%	DATA - REAL ESTATE RECORDS OR STAFF	1-1-b Periodically review the city's Design Guidelines and the design review process to consider their effectiveness; prepare and adopt updates as necessary to address changes in development patterns, trends and practices. 1-1-c Provide informational and educational opportunities on design review for Planning Commissioners and City Council members, as well as property owners, realtors, architects and developers. 1-1-d Develop standards and street furniture specifications for the city's public realm including streets, parks and plazas. 1-1-e Continue to regulate signs throughout the city, and work to remove non-conforming and obsolete signs that detract from the visual appearance of the city. 1-1-f Encourage renovation of older properties so they are more compatible with the desired visual character of the area and fit into the urban fabric. Consider developing incentive programs such a low-interest loans or design and technical assistance. 1-1-g Review site standards for recreational vehicle parks for better integration into the neighborhoods. 1-1-h Continue to conduct design review for commercial development in order to develop and enhance the image of Long Beach as a distinctive destination. 1-1-i Make sure public infrastructure fits in with and enhances the early seashore theme. 1-1-j Develop a public art program and a conceptual Art Plan for the downtown area. 1-1-k Encourage the preservation of the murals that depict the natural and cultural heritage of Long Beach and the Peninsula. Work with local organizations to develop strategies and cultivate funding sources for their maintenance. 1-1-In Develop consistent sign standards for street signs, visitor wayfinding and public announcements. 1-1-m Continue to regulate signs so businesses are clearly identified while protecting the city from visual clutter. 1-1-n Review site development, in particular lighting and landscaping standards to minimize the impact of the many large parking lots on the pedestrian environment.

	GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE	ACTIONS
2-1	Maintain consistency between city policy documents, plans and regulations	Number of inconsistencies identified by the City Council	Less than 10 annually	COMMUNITY DEVELOPMENT DEPARTMENT	2-1-a Update the Future Land Use Map annually to incorporate any land use changes approved through the year.
		between the Capital improvements			2-1-b Update the existing conditions reports on a regular basis to record any new developments and public investments or any changes to the natural environment.
		plan, city plans and the Unified Development Ordinance, and Zoning Ordinance			2-1-c Review the city's Capital Improvement Program (CIP) on an annual basis for its consistency with goals and implementation strategies in the comprehensive plan and stable and sustainable funding strategies
2-2	Strengthen Long Beach's identity as a residential community	Number of residential development permits issued for long-term housing	2% growth over previous year	COMMUNITY DEVELOPMENT DEPARTMENT; GIS	2-2-a Increase the amount of land zoned for residential purposes in those areas that are conducive for residential development.2-2-b Facilitate the location of residential areas within walking or biking distance of commercial areas that offer daily consumables and other services.
2-5	Diversify the commercial base to generate a variety of business types in the city.	Ratio of Number of Tourist Oriented Businesses to Local Serving	Should be decreasing; preferably less than one	BUSINESS LICENSE ANALYSIS	2-5-a Maintain, where possible, distinct commercial zones and standards for visitor-serving, resort and neighborhood-serving businesses.
		Businesses Distribution of sales tax revenue throughout the year	Should be constant; preferably less than 25% differential between seasons	SALES TAX REVENUE BY MONTH	2-5-b Market the city's attractiveness for telecommuters to businesses in nearby metropolitan areas as well those seeking remote branch office locations. 2-5-d Develop standards that anticipate and can accommodate a number of different business types and sizes.
					2-5-e Develop clear standards for auto-oriented and drive-through uses that address vehicular access, circulation, building design, buffers, landscaping, lighting, maintenance, and pedestrian access so they fit better into the town's fabric, enhance the pedestrian friendly environment, and reduce impacts on adjacent residential uses. Such uses should not be located in the downtown core. 2-5-f Integrate development of large scale projects with the architecture of our small seaside community to support and reinforce this traditional hometown architecture.

	GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE	ACTIONS
3-2	Support the rehabilitation of existing housing stock	Number of properties where the assessed value is growing at or above regional	90%	GIS ANALYSIS BUILDING PERMIT RECORDS	3-2-a Consider developing programs that will assist in housing rehabilitation, including but not limited to providing low-interest revolving loans for home improvements.
		average.			3-2-b Conduct a housing condition survey and Housing Needs Assessment and develop a strategy for providing housing to low-income, homeless, seniors, special needs and other populations.
3-3	Create and expand housing opportunities for working families	Ratio of number of properties that fall within the "affordable" range to the number of households earning less than 60% of the State Household Income*	Preferably more than 1	GIS AND COUNTY INCOME DATA	3-2-c Establish Self-Help Paint and Fix-Up programs. 3-3-a Work in partnerships with the Joint Pacific County Housing Authority and other agencies and non-profits to construct affordable housing. 3-3-b Consider incentives for developing a variety of affordable housing types for low to moderate-income households, such as density bonuses or modification of development standards. 3-3-c Examine the Zoning Ordinance to determine whether the regulations create barriers to the maintenance and development of affordable housing and consider amendments
		Percentage of new first-time homeowners of the total number of new homeowners	More than 25%	SURVEY OF NEW HOMEOWNERS	where appropriate. 3-3-d Consider creating a first-time homebuyer's program to assist low and moderate income households. § CDBG funds § USDA Rural Development § Housing Preservation Grant Program § Habitat for Humanity

	GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE	ACTIONS
4-1	Recognize the significant role played by natural features and eco-systems in the environmental quality and livability of Long Beach.	Area of wetlands that are altered by development per year	No net loss of functional wetlands after mitigation	TRACK DEVELOPMENT PERMITS	4-1-a Protect and enhance environmentally sensitive areas by the adoption of City regulations and programs that concentrate urban development in areas that will minimize impacts to environmentally sensitive areas.
		Quality of stream water; compliance with Washington Department of Ecology and Department of Health standards for effluent discharge	Meet or exceed state or federal standards for discharge	ANNUAL WATER QUALITY MONITORING	 4-1-b Encourage well-designed land use patterns that preserve natural features such as wetlands, shoreline dunes and significant fish and wildlife habitat. 4-1-c Utilize acquisition, enhancement, incentive programs, and appropriate regulations to preserve critical areas as permanent open space where development may pose hazards to health, property, important ecological functions, or environmental quality. 4-1-d Ensure that decisions regarding fundamental site design are made prior to the initiation of land surface modifications. 4-1-e Seek to expand open space and recreational opportunities by connecting the shoreline dune complex by a series of walking trails to the wetlands and drainage areas east of the town. This should only be done in a manner that protects the ecologically sensitive areas from being harmed or negatively impacted. 4-1-f Consider public health and safety impacts from potential natural disasters such as earthquakes and tsunamis in the location and design of future land use activities. Consider the possible development of "vertical evacuation facilities" to provide refuge for community residents and visitors from tsunamis. 4-1-g Utilize regulations, incentives and non-regulatory means to preserve, replace, or enhance native vegetation that contributes to the City's scenic beauty. Encourage the incorporation of native plant communities into development proposals where possible.

	GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE	ACTIONS
5-1	Create an integrated parks system that preserves and enhances ecological conservancy lands and transfer them to city ownership	Land area under conservation	Increasing	GIS	5-1-a Continue to negotiate with Washington State Parks to acquire additional conservancy lands and transfer them to city ownership. 5-1-b Map the S4 conservancy lands to delineate wetlands and other natural habitat features. 5-1-c Engage in ongoing dialogue with county, state and federal governments to assure the coordination of conservancy goals and standards. 5-1-d Investigate the potential acquisition of strategic land parcels in the eastern wetland complexes contiguous and/or naturally connected to the City of Long Beach. 5-1-e Investigate the potential of non-acquisition conservation strategies to conserve the wetland complexes. This could include but not be limited to: § Conservation easements, § Voluntary title restrictions, § Private donations, § Transfer of development rights. 5-1-f Retain currently unused right of ways that have recreational or conservation values, or that could serve as public access to future conservation areas. 5-1-g Encourage and facilitate the dedication of lands by private entities and developers for public parks and public conservancy lands.
5-2	Develop neighborhood parks and facilities that meet the active and passive recreational needs of all.	Land area under parks zoning	Park within 1/2 mile of all residences	GIS	5-2-a Make acquisition of land for parks of all types throughout the city a priority. § Acquire parks properties for both active and passive
		Park attendance and use	25% of the population uses 3 times or more per week	ONLINE SURVEY	recreation. § The desired size for neighborhood parks for active uses should be a minimum of 20,000 square feet. § There should be a neighborhood park within 1/2 mile of all residential locations. 5-2-b Prioritize new park land acquisitions in areas of the city that are not served by existing parks. 5-2-c Work with citizen advisory panels and open public forums
					to identify priorities for parks and park improvements.

	GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE	ACTIONS
6-1	Plan for a multimodal transportation system that supports and enhances the land uses envisioned in this Comprehensive Plan.	Number of trips that have shifted from single occupancy vehicles to other forms (Transit, bike, walking, shuttles, carpools etc.)	3% increase annually	ONLINE SURVEY	6-1-a Work to develop codes, street standards and other regulations that support the development of a multi-modal transportation system that enhances the small town atmosphere and ensures an affordable system.
		Sum total of bike lanes, transit miles and trail length in the city per tourist	Should increase annually	GIS AND VISITOR INFORMATION	6-1-b Develop a capital facilities program that provides the transportation infrastructure needed to support the Comprehensive Plan Land Use Element.
		•			6-1-c Work with Pacific County and major employers to develop workforce transit programs, such as shuttles, ride-share, park and ride lots and carpools.
7-1	Plan for the efficient use and development of capital facilities and	Energy use in City Capital	Decreasing	UTILITY BILLS	7-1-a Prepare green building development guidelines and standards for renovations and new buildings where practicable.
	infrastructure in the city.	Facilities and Services Percentage buildings with access to potable water, wastewater and stormwater sewers	96 % Of THORE	UTILITY REPORT	7-1-b The city should review its purchasing program for street lights to include historic pedestrian lights and greater energy efficiency. 7-1-c Continue to maintain and update master plans for water, wastewater and storm water to ensure systems are adequate to serve existing and projected populations.
					7-1-d Assess the readiness of facilities, infrastructure and systems to withstand storms and other emergencies.
					7-1-e Develop street standards and systems that use innovative techniques to reduce cost and maintenance.

	GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE	ACTIONS
8-1	Strengthen Long Beach's development potential by providing	Water and sewer facilities	Sufficient for 5- year growth	CITY SYSTEM CAPACITY	8-1-a Prepare and maintain a Capital Improvement Plan (CIP).
	utility infrastructure that adequately serves the population and through long-range planning, can provide capacity that matches and supports the Future Land Use and/or Zoning	treatment capacity	treatment projection		8-1-b Encourage residential development that will minimize costs of providing community services and encourage commercial development that will augment and support the quality of community services. 8-1-c Prioritize utility investments to increase safety and enhance economic development within the city of Long Beach.
	Plans.	Budget reserves as a percentage of operating costs for Water, Sewer and Stormwater systems	Minimum 20%	CITY BUDGET	8-1-d Maintain water and wastewater facilities with capacities that are adequate to serve the resident and visitor population of the City's service area. 8-1-e Prepare and implement a Water Master Plan. 8-1-f Prepare and implement a Wastewater Master Plan. 8-1-g Prepare and implement a Stormwater Management Plan.
					8-1-h Develop a program of system development charges and fees so as to be able to expand infrastructure to accommodate new development.
9-1	Fortify Long Beach's local economy	Number of businesses that have been in Long Beach for more than 10 years	2% increase annually	BUSINESS LICENSE	9-1-a Widen Long Beach's business association to pool the resources of business organizations along the entire length of the Peninsula and to leverage resources for greater business development and expansion. 9-1-b Ensure all businesses are integrated into the city's architectural character and building framework with the help of design guidelines and design review.
		Sales Tax Revenue Increase	5% increase annually	SALES TAX REVENUE	9-1-c Market and promote Long Beach as livable, healthy community. 9-1-d Coordinate efforts to create workforce housing with economic development activities, to ensure workers can afford to live near their jobs.

TECHNICAL INDICATORS

GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE
City and County Population	Number of new residents moving into the City	Up to 900 additional residents by 2026	CENSUS, PROPERTY TAX RECORDS, OFM ANNUAL ESTIMATE
Income	Percentage of residents below County Median Income	N/A	CENSUS, OFM, HUD
Development Permits	Number, type and valuation of development permits issued annually	2% annual increase in valuation	COMMUNITY DEVELOPMENT DEPARTMENT PERMITS
Housing	Number of units by 1-, 2- and 3+ bedroom categories	More than the number of full- time households	UTILITY BILL
	Percentage unit vacancies	2% vacancy or more	UTILITY BILL
Affordability Index	Median income, median home price		CENSUS, OFM, REAL ESTATE TRANSACTION RECORDS

ENVIRONMENTAL INDICATORS

GOAL	OUTCOME (VALUE) INDICATORS	TARGET	SOURCE
Municipal Energy Consumption	Ratio of total end use energy by City facilities and services to municipal energy generated locally	15% reduction by 2015	PUD BILLS
Air Quality	Air quality index	0-50 AQI	OLYMPIC REGIONAL CLEAN AIR AGENCY
Vehicle Miles Traveled	Miles traveled by residents and municipal service providers; miles traveled by tourists	18% reduction by 2020, 30% by 2035 and 50% by 2050	WSDOT; PCOG; MUNICIPAL VEHICLE RECORDS; SURVEY
Greenhouse Gas Emissions	Annual metric tons of anthropogenic carbon dioxide, nitrogen and sulphur in the atmosphere	To 1990 levels, by 2020; 25% below 1990 levels by 2035; 50% below 1990 levels or 70% below expected 2050 emissions by 2050	PACIFIC COUNTY PUD #2; TOURIST SURVEY; WSDOT; PCOG
Water Consumption	Per household; Per sq. ft. of commercial space; Per adult lodging resident	Decreasing (Target established in concert with Water Master Plan)	PUBLIC WORKS; WATER RECORDS
Surface and Groundwater Quality, Temperature and Levels	Unit per liter; degrees Fahrenheit; depth to groundwater and depth of well	State Requirements: Surface Water (WAC Chapter 173- 201A); Groundwater (WAC Chapter 173-200)	PACIFIC COUNTY DEPT. OF COMMUNITY DEVELOPMENT BI- ANNUAL REPORT; WASHINGTON STATE DEPT. OF HEALTH;; DOE WATER RESOURCE PROGRAM; DOE ENVIRONMENTAL ASSESSMENT PROGRAM
Noise Levels	Decibels (dba) during events or as requested	State requirements: RCW Chapter 70.197 and WAC Chapter 173-60	COMMUNITY DEVELOPMENT - Spot checks using sound level meter (Type I or Type II instrument as described in American National Standards Institute Specifications)
Waste Disposal	Tons of yard and food waste composted; Tons recycled or incinerated; Tons of non-organic waste landfilled; Tons of batteries, paint, hazardous waste, electronics diverted from landfill	100% organic waste (generally 30% of waste) diverted from landfills by 2015; 1,495 lbs per capita of waste landfilled by 2010; 70% of household waste, 75% of commercial waste and 70% of construction waste recycled by 2020; 100% hazardous waste diverted by 2010	SOLID WASTE SERVICE PROVIDER

C. Community Involvement

1.1 Public Meeting (July 5, 2006)

Super 8 Motel, Long Beach WA

About 30 people attended the Open House, including the Honorable Mayor, City Staff and Council Members. The meeting was widely publicized on posters throughout the city and through an ad in the local newspaper. A reporter from the local newspaper was also present. Mayor Ramsey welcomed the audience. John Schelling, the Community Development Director, described the impetus for the project. Anindita Mitra, the Project Manager from CREÄ Affiliates, introduced team members and broadly described the project schedule. Mark Personius described the Growth Management Act (GMA) rules that govern a comprehensive plan update process as well as how this will fit with the Shoreline Master Program (SMP), Critical Area Ordinance (CAO) and Zoning Update tasks that he is leading. There was a lengthy Q&A session that focused on schedule details, prior experience, and community participation among others. For the remainder of the meeting, audience members walked around the room viewing maps and conversing with consultants. The following were summarized by consultants on note paper:

1.1.a. OPPORTUNITIES

- Meeting format speed dating
- Invite businesses into the discussions
- Use reader boards for meeting announcements
- Involve the Astoria radio
- Invite local groups such as the American Legion and Elks Lodge
- Use voter registration to involve all voters

1.1.b. ISSUES

- Name tags for future meetings
- Need cookies at future meetings
- Traffic congestion on Pacific, Sid Snyder 5th
- CAO/SMP need to consider requiring wetlands off-site mitigations inside the city not outside
- Look at watershed level SMP cumulative impact analysis
- Need fire buffer on city lands near residential
- Shore parks habitat management and park design
- Cost /responsibility for pine control the city or property owners

- Is there adequate north-south arterial capacity thru Long Beach for Peninsula build-out?
- Pedestrians/bikes don't like to use Pacific Avenue because of the traffic – they use parallel streets (Ocean Beach Boulevard and Washington Avenue) instead – sidewalks are needed on these street.
- Sidewalks are built over buried phone and power lines
- Need pedestrian /bike circulation plan
- Identify Pedestrian Routes
- Identify Bicycle Routes
- Specify improvements needed (paths/sidewalks) to make these routes functional and attractive
- Need to specify where mopeds, surreys, etc. are to travel
- Shoreview Drive only intermittent segments of R.O.W. "in Hand"
- Need Shoreview Drive for local accessibility, relief of Ocean Beach Boulevard.
- E-W beach access streets all link directly to Ocean Beach Boulevard with no other N-S connections; this puts excess pressure on Ocean Beach Boulevard auto, pedestrian and bike traffic
- Need N-S local connections west of Ocean Beach Boulevard
- Visioning (1996- or so) review document for ideas and priorities

1.2 Public Meeting (August 1, 2006)

CREÄ led two public meetings with the Long Beach Community. The 4:30 PM session was the first formal meeting of the Steering Committee and included city officials and staff, and a few citizens, totaling 21. The 6 PM session was intended to be the major public event but the outreach and publicity was insufficient and only 11 citizens participated.

CREÄ gave a brief introduction to the Comprehensive Planning structure and described the Vision Plan events agenda. The goal of the Vision Plan event was described as a chance to listen to a broad range of public opinion as to the Issues that face Long Beach and to generate ideas about action's and values that will guide the new Comprehensive Plan.

A quick exercise had participants write their major feeling for what is great about Long Beach. The overwhelming answer was "The Beach" in many forms (11), with the rest saying the "small town atmosphere and great people" (7).

A PowerPoint presentation provided "food for thought" to the participants, with 26 images of comparable small towns including Ocean City and Cape May, New Jersey, and Banff and Jasper, Alberta. These were organized into topical areas including: town form and natural habitat design, commercial and civic buildings, architectural character, street characteristics and sustainable town systems.

Following this visual component, participants were asked to identify what issues, opportunities and problems they thought the Comprehensive Plan should address. We will try and summarize into themes what we heard from the community, leading with what we interpreted as the point of emphasis.

Our participants were asked to prioritize the recorded comments with each person having 5 green dots to note their "most important issues" and 1 red dot to mark which issue "most concerned" them. The results are listed after the thematic heading.

1.2.a. OUR BEACH AND DUNES ARE A TREASURE (5 GREEN, 1 RED)

Every participant spoke to the spiritual and commercial values of the Beach. Many residents wanted to conserve the existing shore and dunal ecosystems exactly as they are. For some, this would include putting restrictions on beach driving, and revisiting the extension of zoning accretions resulting from the expanded shore and dunes in recent decades. Other citizens felt that shore driving is a unique and historical characteristic of the city that should be retained. In common was the belief that any development in the dunal zone should be sensitive to the local ecology and have appropriate development standards.

1.2.b. THE COMMERCIAL CORE OF HISTORIC LONG BEACH NEEDS TO EVOLVE (10 GREEN, 5 RED)

Long Beach has had great success with its earlier goals of creating a pedestrian town center, which would be the source of civic revenue. The small parks, historical features and street improvements have worked. But the downtown core is the only location that has done well. Any commercial properties that are out of downtown have failed at a high rate. Boarded-up buildings create a poor image for the City. This project should look at deepening the commercial core primarily to the west, but selectively to the east. There was concern about all the commerce extending north along Pacific, and that there should be considerations about how to focus the commerce in the town core including the old town. Others were concerned that commercial zoning from the center towards the ocean would work against the core commercial zone.

1.2.c. Change Should be Carefully Guided to Retain our Coastal Village (11 green, 1 red)

There was a strong set of proponents who felt "we've done a lot right through incremental improvements." There was a fear that big developers and poor projects would harm the authentic character of Long Beach. A change in scale or character as Long Beach grows was thought to be danger. Nor was there a desire to be like Cannon Beach, an elite community. Beauty and history, as well as the spirit of a small community, were put forward as the qualities that should be retained.

1.2.d. CONNECT AND EXTEND OUR OPEN SPACES (14 GREEN, 2 RED)

Seen as the primary reason why both residents and tourists come and stay, the Ocean and Dunes can be utilized even further. Complete the Discovery Trail south to Cape Disappointment and north to Leadbetter State Park. Build the bicycle and pedestrian connections east to the Lake and Swale region which can be another way to highlight this unique ecological zone and the cranberry industry that shares this area,

1.2.e. THE ECONOMY NEEDS TO ADD VARIETY AND LONG TERM JOBS (2 GREEN)

The seasonal variations in the present tourism cycles need to be mitigated. The active seasons should be extended and deepened with new reasons to come to Long Beach. Losing so many businesses and jobs has done harm to the community. Look for new businesses that can be located here. Many ideas were put forward about for the winter Long Beach.

1.2.f. WE NEED A MULTI-PURPOSE COMMUNITY CENTER AND PARK (5 GREEN)

A place for youth and other citizens to gather, be educated, mentored and entertained was seen as a community need. High rates of unemployment and children leaving the area were lamented. There is a need for a public place for the community to build traditions that isn't a commercial or open air location. It was suggested a central park would complement such a building project.

1.2.g. Local Transportation Improvements (5 green)

Sidewalks and pedestrian paths would improve safety. Bike lanes defined or added to existing streets would also be an important improvement. Public Transportation was only lightly mentioned, but increased frequency and routes was noted. Local traffic and parking issues were discussed in light of pedestrian and bicycle circulation and safety.

1.2.h. MARKET LONG BEACH BASED ON A GREAT QUALITY OF LIFE (2 GREEN)

This would include seeking the "intelligent tourist" that would appreciate the best in fine dining, eco-tourism related activities, and local sustainable technologies. Quiet places and a slow pace of life should be balanced with good family entertainment in the town. There was a recognition that focusing on town character and quality will in itself lead to greater economic activity and draw.

1.3 Public Meeting (September 14, 2006)

The meeting started with a review of the summary from the prior public meeting on August 1, 2006. An invitation was extended to the group to review the meeting summary at their leisure and contact the City should any changes be necessary. There was also some discussion regarding the current vision for the city in order to assess whether the vision is responsive to new economic and market realities. It was also suggested that perhaps the vision could incorporate stronger references to the community's attachment to its natural surroundings and cultural heritage

The meeting also included brief summaries of the three draft technical reports on land use, transportation and market overview. The key observations in the three reports were validated. The audience at this meeting brought with it a major concern about the health of the local economy. The comments are as follows:

1.3.a. Transportation

- The Trolley that currently serves large events is cool. The city should consider expanding trolley service during other times of the year.
- There is a need for more bike trails
- Perhaps the streets could be designed to accommodate slower vehicles, like golf carts
- The pedestrian environment and circulation need to be improved (particularly across SR 103)
- Improve shipping and transportation
- Public transportation to and from the outside world is not available

1.3.b. Economy

- Need for Long Beach to be pro-growth
- There are no franchises, and few job opportunities
- Offers the opportunity for remote technological outfits such as phone centers, bank processing centers and so on
- Need for more tourists during winter; some activities such as clam digging, storm watching, whale watching, and birding attract a large number of people already during winter months
- Perhaps the city can create a niche for itself in eco-tourism
- There is the potential for the city to improves its marketing
- There is a problem with phone service on the Peninsula

- Restaurants and other businesses do not have the volume of business after end of day (5pm) to justify leaving the businesses open late; little night life
- Schools are good
- There should be an effort to balance the increasing number of retirees moving into the area with young families
- There is a lack of stores that offer basic services and consumables (departmental stores, specialty grocery etc)

1.3.c. IDENTITY

- The peninsula should operate as one
- Long Beach is the heart of the peninsula
- There is a need for a city center that assembles all major public uses around a public gathering space (suggested co-located uses include meeting space, library, community center, police, fire etc)
- Housing
- There is a need for affordable housing to match the projected population increase
- There needs to be better police protection in the city

1.4 Public Meeting (September 27, 2006)

How the Environment Shapes our Community: Critical Areas, Shoreline, Parks and Open Space

There were two workshops: the first was with the Steering Committee at 4:30 pm, and the second was a Public Meeting which began at 6:30 PM.

1.4.a. Steering Committee

There were 7 Steering Committee (SC) members present. In addition, Robert Strope, City Administrator, Mark Personius and Davidya Kasperzyk, CREÄ presenters, were in attendance.

The SC was given an overview of the evening's agenda and there was a discussion of the formats of previous public meetings. There was acknowledgement that the SC and the Public needed to have more time to respond to information and to develop substantive contributions. There was an immediate task asked of the SC by Robert Strope. He requested that the SC write their own "Vision Statement" of what they would like to see in 20 yrs. He asked that the documents be in his office by Oct. 4, 2006.

Mark Personius presented a detailed PowerPoint presentation that described protection of critical areas and wetland functions, the wetland inventory, and shoreline management through maps, text and an overview of the regulatory requirements. Davidya Kasperzyk presented the strategic path to the development of the Open Space Element for the Comprehensive Plan.

(a) Specific Discussion Points included:

- The Wetland Inventory Maps were developed both from 1979 FEMA base maps and aerial photos (together comprising the data sources for the US National Wetlands Inventory or NWI) and from a wetlands inventory conducted for the City by a wetland consultant of the interdunal wetlands for the Dune Management Report in 1998-99. The maps themselves are representational of suspected wetlands and are considered to be indicative but have no regulatory role. Subsequent wetland delineation is required at the time of a site-specific project permit application in order to identify actual documented wetlands on a particular piece of property.
- The City of Long Beach has taken the position that City-designated R.O.W.s into the S4 conservancy areas are roads, and can be improved and developed. The Washington Dept. of Ecology has asserted that the City cannot. This issue is unresolved.

- Robert Strope felt that the timing of the second Parks Workshop should not come before the Oct. 25th Public Meeting but after. The SC agreed and thought that the Oct. 25th meeting should be used to develop maximum participation in the later (Nov. 8) Parks Workshop.
- There was the concern stated that the "state analysis doesn't capture internal state movement... of retirees to the Long Beach Peninsula." Mark Personius responded that "We are talking to the state Office of Financial Management about seasonal and permanent growth models and impacts."

1.4.b. Public Meeting

- The public meeting was attended by 34 citizens and a few members of the SC.
- Mark Personius presented a detailed PowerPoint presentation that described protection of critical areas and wetland functions, the wetland inventory, and shoreline management through maps, text and an overview of the regulatory requirements. Davidya Kasperzyk presented the strategic path to the development of the Open Space Element for the Comprehensive Plan.

Subsequently the audience was encouraged to ask questions of the team members present. These questions and answers are summarized below.

QUESTIONS

Does the "Best Available Science" requirement include gray literature (e.g. Fish and Wildlife memo's)

How is the planning going to consider global warming? For example ocean level rise.

Is there enough water pressure? I'm concerned that with all the new growth I won't be able to flush my toilet on a Sunday morning.

ANSWERS

Yes, Fish and Wildlife, but no "anecdotal information".

We are considering the "best available science" which suggests a 2-4 ft. rise. One has to also consider the threat of a near source tsunami with a 40 ft. surge –above the 25' near front dune.

The city has separate plans for water and sewer capacity that are adequate (MP). This year there was new capacity added to the sewer system. Next priority is storm-water capacity.

General comments about localized flooding from new development occurring in the dunes...thought to be caused from new home construction and poor stormwater drainage design...

Should be examined as part of the review of the subdivision regulation standards and/or stormwater management plan.

(a) Specific Discussion Points included:

- We need a reliable way of monitoring engineered development in the dunal area. Need a foolproof process to assess the developments –critical review of the outcomes of the engineered and "expert" opinions.
- The City has no integrated storm-water system. We have some ditches, lines and pumps and we are considering a whole city storm water management strategy. There is a high failure rate of localized/private on-site systems. Storm-water regulations are fast growing. A regional storm-water system is cheap.
- Interdunal wetlands may be of less "biological" value than the more mature forested wetlands west of the city, however, they remain an important aesthetic component of the seashore dune complex and provide important wildlife and other natural functions.
- Comment: the presentation was too long, there needs to be more time for comment and exchange.

1.5 Community Workshop (October 25, 2006)

More than 60 people attended the public workshop held at City Hall on October 25, 2006. The workshop focus was to present the attendees three alternative scenarios for Long Beach's growth in the next twenty years. After an initial project update, CREÄ presented a description of the city's form and directives for the plan. These directives are based on community direction from earlier public meetings.

1.5.a. DIRECTIVES FOR THE PLAN

- Change should be carefully guided to retain the coastal village atmosphere since residents treasure the historic town, the beach and the dunes
- Future development needs to be sensitive to both conserving the ecological function as well as the "spirit" of the community
- Connect and extend open spaces
- Develop a Civic Center that includes a new city hall, a multipurpose Community Center and Park among other public service functions
- The local economy should be diversified to include general services and jobs for residents
- The tourism marketing for Long Beach should extend into currently "down seasons" so there is an all-year active tourist economy

Subsequently the audience was encouraged to ask questions of the team members present. These questions and answers are summarized below.

QUESTIONS/ISSUES

- HOUSING: The cost of land in Long Beach has been rising steadily and is pricing out housing possibilities for moderate to low-income residents and seasonal workers
- TRAFFIC Locals never use Pacific Highway during high tourist season.

ANSWERS

- This update will include strategies for more affordable housing and workforce housing for moderate income families in Long Beach
- Alternate routes for local traffic as well as separation between tourist destinations and local retail will be examined.

- Need to be able to safely cross Pacific Highway.
- Does the current Urban Growth Area extend to Cranberry Road?
- POPULATION. Current population projection by the Office of Financial Management (1%/yr – about 4,000 new people in the County in the 20 yrs) seems wrong. There's seems to be more people moving to Long Beach. One should consider seasonal homes and the influx of Baby Boomers. Several non-resident homeowners are retiring in Long Beach and becoming permanent residents.
- What percentage of the population is seasonal?

- We are looking at different solutions and locations for safe pedestrian and bike crossings across Pacific Highway
- The 1996 Comprehensive Plan identified a 20-year Urban Growth Area that extends to 113th Street. The 10-yr UGA has already been incorporated into city limits
- The project's Steering Committee is investigating the current population projections for the city. We will tailor this plan towards population numbers that are recommended by this group. Should these numbers vary greatly from the County's estimated population capture by Long Beach, they will need to be approved by the County, the other towns in the County, OFM and CTED (Community, Trade and **Economic Development)**
- There are no official counts for the number of seasonal homes in the city. Numbers are estimated from site visits taken by city staff and Census data that lists many homes as "Vacant."

- WETLANDS- Aren't they off limits to development?
- Local Food Production.(Pea Patch in City Parks?)
- Any Ideas about another east-west arterial connecting the city to Sandridge?

- Based on the Census data and no change in Long Beach's growth or capture rates, we have estimated that in the next twenty years, there will be a projected increase of 249 permanent homes, and another 319 seasonal homes or a ratio of 1:1.3
- The ecological function of wetlands must not be impaired but interpretive & recreational opportunities can link wetlands to the east and west of the city.
- Great idea will include this in the plan update.
- Extending 2nd Street N to Sandridge was considered earlier but the proposal was not pursued.

1.5.b. THREE ALTERNATIVES

Three different futures were imagined by CREÄ team members. Each alternative presumed a similar amount of growth and varied in how tourist destinations will be located as well as how residential density would be allocated. However, each alternative reflected the same six underlying principles. These and associated strategies are listed below. It was not CREÄ's intention to create the most desirable scenario for this workshop but to have the community describe to them what was most desirable through this workshop. There was a quick vote taken at the end of the alternatives description. The tally is reported below.

- Foster walkability
 - Create a clear pedestrian and trail network
 - Consider slower alternate means of travel (golf carts? Surreys? Jitneys?)
 - Plan on a dense network of streets

- Create a sense of "place"
 - Clearly define the "Civic Center" and downtown
 - Identify other destinations
 - Avoid monotony
- Integrate activities
 - Tie neighborhoods and resorts to standard grocery stores
 - Locate offices downtown
 - Establish affordable housing to support resort and other tourism-based activities
- Stimulate the economy
 - Tie plan to an economic strategy or "theme"
 - Provide the infrastructure and spatial requirements that will support the desired economic strategy
 - Focus and deliberately connect tourist destinations
- Strengthen neighborhoods
 - Provide amenities for neighborhoods north of downtown/civic center
 - Delineate clear edges to foster a sense of identity
 - Carefully balance seasonal and permanent residential distribution
- Increase safety factor (particularly for public investments)
 - Locate public amenities in less hazardous areas
 - Reduce exposure of public safety personnel (fire, police, etc.) to hazards
 - Minimize public expenditure

1.5.c. ALTERNATIVE SCENARIOS

(a) Green Links

This alternative assumes that Long Beach develops an eco-tourism based economic strategy that celebrates the rich natural heritage east and west of the city. As such, it is imagined that in this scenario, resorts are concentrated in 3 or 4 clusters. The development rights of many "piano key properties" are transferred into these higher density resorts. This consolidates large tracts of natural areas that stretch the entire length of the beach. The taxes from these developments help offset much of the costs to create and maintain the eco-tourism driven infrastructure. This infrastructure consists of not only clusters of activities such as museums, rentals, parking, restrooms and so on, but

an extensive multimodal all-season trail network in the natural areas and through the city. Pacific Highway remains the main travel corridor through the city. Adjacent lands are upzoned for multifamily or mixed use buildings. Of these, the mixed use buildings are concentrated around downtown and the retail center in north Long Beach. The new Civic Center is located east of downtown and is distinct in its identity and use.

(b) Ocean View

This alternative assumes a reduced role for Pacific Highway in the city's economic strategy. Rather, traffic to Long Beach is redirected from SR 103 to Sandridge Road and then to either Sid Snyder Drive or Pioneer Road. Tourist traffic enters downtown but is directed further west to two concentrations of mixed use developments at the termini of these roads. In this manner tourist traffic is primarily contained around a new north-south arterial closer to the ocean. In between, new dense vet low-rise short-term or seasonal residential development is accommodated. Through a series of land swaps, existing park lands are exchanged with "developable" lands such that the city's park is consolidated. A few green streets connect east-west and are tied to tourist amenities. Pacific Avenue is gradually converted back to a residential setting. This is buffered from the traffic with a dense boulevard treatment. The new Civic Center is a dramatic northern terminus for the downtown. The east edge of town is defined by a new multimodal boulevard that provides access to the adjoining natural areas.

(c) Heart of the Peninsula

This alternative emphasizes the role that Long Beach's downtown plays in the Peninsula. The rest of the city is pretty much left untouched. Therefore, Pacific Avenue remains a primary north-south corridor in the city and is mostly an eclectic mix of residential and retail uses. Development focus is on the downtown area. The limits are extended east and west. Towards the east the downtown area crosses and embraces the wetlands as a "central park." Development continues along 2nd Street N and Sid Snyder Drive to create a new, improved sense of entry at the Sandridge Road intersection. The tight grid of the downtown area is extended into this eastern extension. This extension includes a high density of multifamily and vertically mixed used buildings. This alternative directs new population to undeveloped properties within the city's limits, into the downtown area as well as into the 20-year UGA north of the city. Development is thus directed away from the higher priced properties on the water and increases the

potential for affordable housing in either multifamily development or as a part of mixed use buildings. Retail is concentrated at the intersection of Pioneer Road and Pacific Highway in a neighborhood retail center to serve the growing residential and resort population up north. The downtown grid is also extended west in the form of retail corridors along Sid Snyder Drive and Bolstad Avenue.

1.5.d. VOTE RESULTS

After the three alternatives were presented to the group, a quick vote showed that the audience generally favored the "Heart of the Peninsula" and the "Green Links" alternatives.

Green Links – 17; Ocean View – 0; Heart – 21

After this quick show of hands, a significant portion of the audience left and the remaining participants broke out into 4 groups. Below is a summary of the different scenarios proposed by the four groups.

1.5.e. WORKSHOP SUMMARIES

(a) Common Sense

This group wanted to develop two phases for the city's long-term planning: a 10-year and a 20-year plan. This group generally favored the "Heart of the Peninsula" alternative. They liked the concentrated downtown focus and wanted the district to be generally mixed use with commercial or retail on the ground level. They felt that downtown should extend to 4th or 9th Street North. On the east it should extend all the way to Washington Street but in the 20-year planning horizon it should extend to "V" Street, also called Doc Hill Road. They liked the idea of a Civic Center but wanted it to be multifunctional with recreational activities included in the proposed mix of uses. They felt that the Civic Center should be by the existing Fire Hall. There are aspects of the Green Links proposal that they liked, particularly the connections between the interdunal areas with the Mid-Peninsula wetland system. They recommended that generally the height limit for beach front properties should be lowered to 2 or 3 stories. Overall, they did not want buildings to create a "cliff-like" effect along any street or waterfront. They wanted the city's growth to be generally pro-growth & tourist oriented.

- Pacific Avenue should be a two-way boulevard.
- Downtown should extend both east-west as well as north-south.

- Tourist traffic entering the city should be diverted to Sandridge Road but also remain on Pacific Avenue.
- The City should maintain large parks along the ocean and also along Tinker Lake
- The city should not plan on more than 249 new homes in the next 20 years.
- The city should focus on increasing tax revenue through its Lodging and Motel Tax and Sales Tax.
- The city's eastern entrance should be at Sid Snyder Drive/Highway 103.
- The city should accommodate population increase through more density in town and then extend to the east.



- Mixed Use (retail) land uses should line Pacific Avenue.
- The proposed Civic Center should be near current the Fire Hall.
- We should have multimodal trails throughout the city and integrated with streets.
- There should not be more dense development along Ocean Beach Boulevard.

(b) Months vs. years

This group also liked the parks layout in the Green Links alternative along with a concentrated yet larger downtown as described in the "Heart of the Peninsula" alternative. They liked the idea of the downtown extending both east and west, and a complimentary residential retail center on Pioneer Road. They suggested that the Civic Center should be located close to where the tourists will be and that perhaps a theater and a library could be added to the mix of uses being considered for the Civic Center. They were concerned about how the extensive parks system would be funded.

- Pacific Avenue should be both a two-way boulevard and a one-way couplet (in different sections).
- Downtown should extend east.
- Tourist traffic should enter the city from both Sandridge Road and Pacific Avenue.
- The city should maintain large parks along the Ocean and Tinker Lake. Watch the cost.
- The city should plan on more than 249 new homes in the next 20 years.
- The city should focus on increasing tax revenue through its Lodging and Motel Tax.
- The city's eastern entrance should be at Sandridge Road/Sid Snyder Drive.



- The City should accommodate population increase in the 20-yr UGA north
- Local-use businesses north of 2nd Street North and tourist interest businesses in the grid downtown should line Pacific Avenue
- The proposed Civic Center should be located north of downtown
- There should be multimodal trails throughout the city and integrated with streets (half and half)
- Put more development along Ocean Beach Boulevard, but keep the development low and don't increase the density.

(c) Downtown Advocates

This group favored the "Heart of the Peninsula" alternative blended with the Ocean View" alternative. They proposed that the middle of Pacific Avenue be a pedestrian mall. They would like to divert their traffic to Oregon Street. The city should have parks on both sides. However, city growth should occur within city limits. They too did not want a cliff effect along the beach.

- Pacific Avenue should be a pedestrian mall.
- The downtown should extend east.
- Tourist traffic should remain on Pacific Avenue.
- The City should maintain large parks on both sides: along the ocean and along Tinker Lake.
- The city should plan on more than 249 new homes in the next 20 years.
- The city should focus on increasing tax revenue through some means other than increasing taxes.
- The city's eastern entrance should be at Sandridge Road/Sid Snyder Drive.
- The City should accommodate population increase in a new east UGA.
- The land uses that align Pacific Avenue should maintain a small town feel.
- The proposed Civic Center should be located north of downtown.
- We should have multimodal trails only along the city's edges.
- There should be more dense but lower rise development along Ocean Beach Boulevard.



(d) Seaview Advocates

This group wanted tourists to enter from both Pacific Avenue and Sid Snyder Drive. They want Seaview integrated into Long Beach. They proposed that Long Beach should annex Seaview to increase city revenue. This will offer current Seaview residents a certainty of development rights.

- Pacific Avenue should be a twoway boulevard.
- Downtown should extend west.
- Tourist traffic should enter from both Pacific Avenue and Sid Snyder Drive; short streets should run north and south between Pacific Avenue and the ocean.
- The City should maintain large parks both along the ocean and along Tinker Lake.
- The city should plan on more than 1,000 new homes in the next 20 years.
- The city should focus on increasing tax revenue through annexing Seaview.
- The city's eastern entrance should be at Sandridge Road/Sid Snyder Drive; Idaho Avenue/Sid Snyder Drive; and Alt. 101.



- Mixed-Use (retail) should align Pacific Avenue.
- The proposed Civic Center should be located east along Sid Snyder Drive.
- We should integrate multimodal trails along with streets.
- There be more dense but lower rise development along Ocean Beach Boulevard, from the center of the city outward.

1.5.f. SUMMARY OF PREFERENCE FORM

1	Should Pacific Avenue be		1 Pedestrian Mall			
1	A two-way boulevard	A one-way couplet	2 Both (different sections)			
2	Should downtown					
1	Extend west	2 Extend east	1 Both			
3	Should entering tourist traffic					
	Be diverted to Sandridge	1 Remain on Pacific	3 Both			
4	Should the city maintain large	Should the city maintain large parks				
	Along the Ocean	Along Tinker Lake	1 Both			
5	Should the city plan on more than 249 new homes in the next 20 years?					
3	Yes <u>1000</u>	1 No				
6	Should the city focus on increa	asing revenue through				
3	Lodging and Motel Tax	1 Sales Tax	2 Other: TBD; Seaview			
7	Should the city's eastern entrain	nce be at				
3	Sandridge/ Sid Snyder	1 Idaho/Sid Snyder	1 Other: <u>Alt 101</u>			
8	Should the City accommodate	population increase				
1	In the 20-yr UGA north	1 In a new UGA east	1 More density in town			
9	What kind of land uses should align Pacific Avenue?					
2	Mixed use (retail)	Multi-family	2 Small town, local uses			
10	Where should one locate the proposed Civic Center?					
2	North of downtown	1 East along Sid Snyder	1 Other: By existing Fire Hal			
11	Should we have multimodal tr	ails				
3	Throughout the city	1 Only along edges	1 Integrated with streets			
12	Should there be more dense bu	lt lower rise development along Oce	an Beach Blvd?			
2	Yes	1 No	Center City outward			

1.6 Community Workshop (November 8, 2006)

Parks and Open Space – Defining Goals and Developing Planning Alternatives

The Planning Team of Anindita Mitra and Davidya Kasperzyk arrived in town near 3 PM and set out to review facts on the ground and prepare for the evening workshop. The event took place in the City Council Chambers and 31 Citizens participated as well as City Staff Robert Strope, David Glasson and Kaye Simonson. A PowerPoint presentation quickly gave an overview of where we are in the project and reviewed the Natural Environment basis for the Open Space Plan.

Davidya began the session with a review of what the CREA Team has heard from the community related to the Open Space and Recreation Goals. These included:

- You love the Beach!!
- You identify yourself as a Pacific Ocean Coastal Village
- You recognize the ecological and aesthetic value of the Dunes Complex
- You see an opportunity to access and better understand the Eastern Wetland Complex
- You want to link your community resources with trails and safe pedestrian walks
- You want to be seen as an ecological tourist destination
- You want a community multipurpose center

Two discussion groups were formed that allowed citizens to review a set of goals that Davidya had prepared based upon community input. The Six Goals were:

1.6.a. Preliminary Goals for the Parks Plan

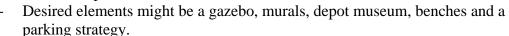
- 1. Create an Integrated Parks System that conserves and enhances the Ecological Conservancy Lands.
- 2. Develop Neighborhood Parks and Facility that meet the passive and recreational needs of all current and future citizens.
- 3. Support the Cultural Heritage of Long Beach through the conservation of historic elements and the creation of quality interpretive facilities.
- 4. Use Multi-Modal Trails, Safe Green Streets and Ecological Greenways to link the elements of the Park System.
- 5. Promote the Park System as a recreational and ecological resource for the use of both residents and tourists.
- 6. Create a Financial Plan to maintain and operate existing parks elements and acquire desired strategic resources and programs.

1.6.b. REFINING THE GOALS

Both group sessions were comfortable with the Preliminary Goals and did not choose to change the wording or add goals. There were a number of recorded comments about ideas and values that the citizens wanted included in the planning of the Parks Element. These were summarized by the two facilitators and included:

Group A

- Walking, biking and moped activities using the dunes and the inland wetlands would be great.
- Public uses should include picnic, beach volleyball, and entertainment for kids.
- A boardwalk on the east would provide more opportunities for recreation/interpretive elements.
- A water park or pool (nearest is in Klipsan Beach) would be a used asset.
- Bird-watching is an activity that is year round and would use platforms, interpretive sign and could lead to a museum/interpretive facility.
- Pocket parks for residents, and kids in the north and south portions of Long Beach over .5 miles beyond
 - the central park facilities are needed.





Group B

- Who is paying for the plan? Do we need more land/parks when we are not using/maintaining what we have already?
- Need restrooms spread around for the public –with signage leading people there.
 It might work to have seasonal portable restrooms. Also provide more garbage cans.
- Lighting (solar, subtle) on the Discovery Trail would help the perception of safety. Creating a Loop Trail east to the wetlands would be an asset. Signage could be subtle like in Ireland where yellow rock cairns guide walkers.
- Community Center and recreation needs include racquet ball, swimming pool, hot tub.
- Let the trail change appropriately as it moves (e.g. Chehalis Trail).
- Place a library where it can be accessed easily by kids.
- Kids need hope in a drug free environment and safe skateboard areas in public view. Perhaps we need a City Town Hall meeting about how to support our kids.



1.6.c. Design Opportunities and Alternative Plans

The next session was taking the ideas and trying to place them on the maps that were provided to each group by Anindita and Davidya. Citizens identified potential locations for green streets connecting the West shoreline to the Eastern Wetland area, as well as locations for parks, interpretive facilities, and community recreation facilities. These were recorded on acetate overlays (and are included in digital photos shown below).

1.6.d. REVIEW AND PRIORITIZATION

In sharing the results of the two alternative group plans (Group A and Group B) there was a discussion of the shared concepts between the two plans. Further interest in what is really possible was demonstrated by questions that included: Can we acquire the Cranberry Farms? Should we acquire Cranberry Lake?

It was stated in the closing that a preferred plan option will be developed for the steering committee to consider, and form recommendations.

1.7 Community Workshop (February 6, 2007)

Parks and Open Space Plan Presentation

CREA Affiliates, LLC was represented by Davidya Kasperzyk and Mary Heim. Long Beach participants included Robert Strope, Kaye Simonson, David Glasson, 2 city council members, steering committee members and members of the community, for a total of approximately 23 attendees.

Handouts for the meeting included survey results from 19 attendees from previous parks meeting and 162 surveys distributed through schools that reflected responses by household. Background documents for the Parks, Open Space, and Recreation Element, were also handed out, on topics including green streets, level of service standards required under GMA, "needs based" new parks vs. opportunity sites, view protection policies and cultural heritage planning. Draft recommendations for open space elements included East-West Green Streets, Old Pedestrian Streets, Neighborhood Park Opportunity Acquisition Sites and Eastern Wetland Acquisition Sites.

Davidya introduced the meeting with the following agenda:

- Review of the 6 goals of the Parks Element
- Survey results summary
- Background on Washington GMA what is required
- Time for the community to start making choices about the parks element of the plan. How we make choices for the future facilities.
- Start to prioritize and implement those ideas for the future.

1.7.a. SURVEY RESULTS

The parks survey and results discussion involved a step-by-step description of each question and response(s) from both groups of respondents. It was noted that both surveys showed a high level of interest in biking and walking trails. A community center/swimming pool was also mentioned and one participant noted that the interest in

"Water Playground" in the school-based survey could have meant something similar to the aquatic center in Astoria. No strong opinions were expressed on any single item in the survey results. There seemed to be general agreement that the survey results reflected the desires of the community.

1.7.b. Green Streets

After explaining the concept of green streets, there was agreement that safety is the major concern. Crossing Pacific Avenue safely will pose the greatest challenge. Many residents and tourists currently ride bicycles on the Discovery Trail as well as Ocean Beach Boulevard, and Idaho/Washington. Avenues. Everyone recognized that current conditions on Ocean Beach Boulevard and Idaho/Washington Avenues did not offer a safe corridor for bike riders. People stated that they rode their bikes for recreation and exercise and would like the choice of another North/South option since the Discovery Trail can be very windy. The suggestion of a loop system seemed to be generally positive.

One participant voiced a concern that the street was even too narrow for the current traffic configuration and questioned the feasibility of adding pedestrian and bike access. Davidya clarified that the ROW on those streets is 55' and was able to show road cross-section examples of possible configurations within those dimensions. The participant was still concerned that the land use adjacent was residential and that the new configuration might preclude parking and interfere with the current use.

There was interest in the East-West green streets providing additional access points to the Discovery Trail and the possibility of an East wetlands boardwalk/trail. Responding to a question of how a boardwalk system might be funded, Davidya and the group quickly identified several possibilities that might be pursued:

- Federal / ISTEA
- State Interagency Council
- Local levy/bond issue
- General fund, even allocate for ½ mile per year to get it rolling
- Rails to Trails
- Private foundation grant sources

Davidya stressed that priorities can be identified to implement the plan over time. It might take quite some time to get there but a lot can be accomplished with volunteers who are determined to make it happen.

Robert stepped forward to ask the group if there were any suggestions regarding current development guidelines that require curb & gutter, sidewalk, and/or bike lane construction as new projects are built. The City will be reviewing these guidelines in the near future. There seemed to be a sentiment that this might lead to a piecemeal approach with bits of new sidewalk here and there but no overall strategy. One suggestion was to require an impact fee or assessment that would go into a dedicated fund instead. This could then be used to implement prioritized segments of the overall plan.

1.7.c. GMA BACKGROUND AND LOS FOR PARKS

Davidya described the level of service requirements for parks and open space under Washington GMA as 1 acre per 100 residents. At the current population, Long Beach is at just about that level. However, the criterion of everyone having access to parks within ½ mile is not being met in the North and South ends of the city. He described two ways to address acquiring new parks and open space:

- Needs Based identifying areas where LOS is low and vacant parcels to acquire.
- Opportunity Based not identifying specific sites but rather looking for "opportunity sites" within the need area.

The discussion that followed showed mixed support and concern. Several participants were concerned that the ½-mile criteria for all residential areas would not address the year-round residents' needs and ignored the fact that seasonal residents come for the beach, not recreation in city parks. The respondent wanted to see the local demographics mapped to show the density of year round residents vs. seasonal and tourist population. Another, citing an example from when he lived in another state, was concerned that a requirement in a new subdivision to set aside a neighborhood park would result in parking problems near those parks and not really address the best interest of the homeowners and users. There was no clear direction given during this discussion on where or how to address the LOS requirement.

1.7.d. VIEW PROTECTION POLICIES

Davidya presented the topic and discussed the idea of identifying and protecting the current views that residents value. Also, the concept of

a "view sequence," e.g. the dune pines to grass to dune and beach, was discussed. He also mentioned the possibility of local structures that are valued but that may be obstructed by utilities.

There was general agreement that the views experienced along the Discovery Trail and from the beach looking back towards town from the beach are valued. One resident mentioned the fact that you do not see major development gives a sense of solitude and experience with nature.

1.7.e. Cultural Heritage Planning

Davidya introduced this relatively new policy discussion and gave examples of topics to be considered. He asked for input from participants to help identify and conserve these resources. There was little response on this item. Davidya asked for people to spread the word about this topic and to help identify other resources that residents that would like to use to provide some guidance in this arena.

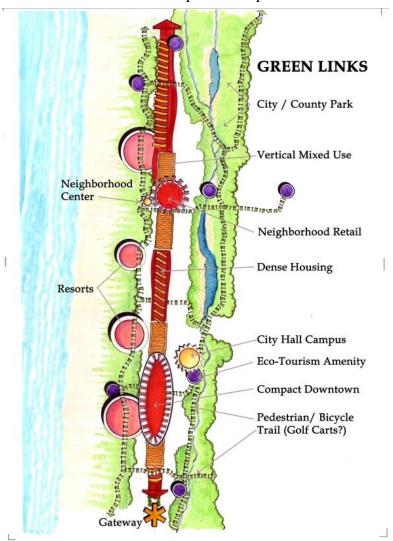
At this point Davidya asked the participants to come forward and took closely at the Green Streets map with overlays and the Preferred Direction Map.

D. Urban Form Alternatives

1. GREEN LINKS

The Green Links alternative assumes that Long Beach develops an eco-tourism-based economic strategy that celebrates the rich natural heritage east and west of the city. As such, it is imagined that in this scenario, resorts are concentrated in 3 or 4 clusters. The development rights of many "piano key properties" are transferred into these higher density resorts. This consolidates large tracts of natural areas that stretch the entire length of the beach. The taxes from these developments help offset much of the

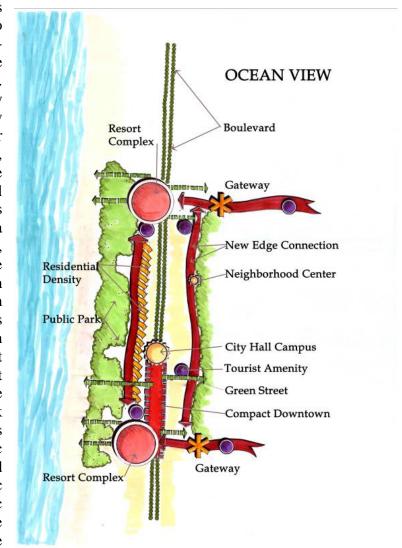
costs to create and maintain the ecodriven tourism infrastructure. This infrastructure consists of not only clusters of activities such museums. rentals. parking, restrooms and so on, but an extensive multimodal all-season trail network in the natural areas and through the city. Pacific Highway remains the main travel corridor the through city. Adjacent lands are upzoned for multifamily or mixed-use buildings. Mixed-use buildings are concentrated around downtown and the retail center in north Long Beach. The new Civic Center is located east of downtown and distinct in its identity and use.



2. OCEAN VIEW

The Ocean View alternative assumes a reduced role for Pacific Avenue in the city's economic strategy. Rather, traffic to Long Beach is redirected from SR 103 to Sandridge Road and then to either Sid Snyder Drive or Pioneer Road. Tourist traffic

enters downtown but is directed further west to two concentrations of mixeduse developments at the termini of these roads. Tourist traffic is primarily contained around a new north-south arterial closer to the ocean. In between, new dense yet low-rise short-term or seasonal residential development is accommodated. Through a series of land swaps, existing park lands are exchanged with "developable" lands such that the city's park is consolidated. A few green streets connect east-west and are tied to tourist amenities. Pacific Avenue is gradually converted back to a residential setting. This is buffered from the traffic with a dense boulevard treatment. The new Civic is Center a dramatic northern terminus for the downtown. The east edge

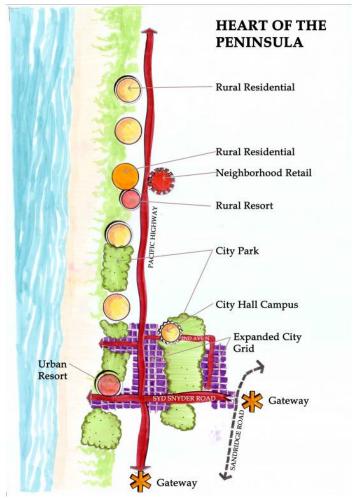


of town is defined by a new multimodal boulevard that provides access to the adjoining natural areas.

3. HEART OF THE PENINSULA

The Heart of the Peninsula alternative emphasizes the role that Long Beach's downtown plays in the Peninsula. The rest of the city is pretty much left untouched. Therefore, Pacific Avenue remains a primary north-south corridor in the city and is mostly an eclectic mix of residential and retail uses. Development focus is on the downtown area. The limits are extended east and west. Towards the east, the downtown area crosses and embraces the wetlands as a "central park." Development

continues along 2nd Street N and Sid Snyder Drive to create a new, improved sense of entry at the Sandridge Road intersection. The tight grid of the downtown area is extended into this eastern extension. This extension includes a high density of multifamily and vertically mixed-used buildings. This directs alternative new population to undeveloped properties within the city's limits, into the downtown area as well as into the 20year UGA north of the city. Development is thus directed away from the higher priced properties on the water and increases the potential for affordable housing in either multifamily development or as a part of mixed-use buildings. Retail is concentrated at the intersection of Pioneer Road



and Pacific Avenue in a neighborhood retail center to serve the growing residential and resort population up north. The downtown grid is also extended west in the form of retail corridors along Sid Snyder Drive and Bolstad Avenue.

E. Existing Conditions (2006)

1.	Urban Form	E-1
2.	Existing Land Use	E-4
3.	Housing	E-12
4.	Environment	E-17
5.	Parks, Open Space and Recreation	E-35
6.	Market Överview	E-45
7.	Transportation	E-52
8.	Capital Facilities	E-66
9.	Utilities	E-95

1. URBAN FORM

Long Beach is a unique tourist destination in the Pacific Northwest. It gets its distinct character from its relatively natural beach that is within walking distance from its main commercial area. Unlike other beach communities in the region where buildings creep up to the edge of the beach, the dunes create a buffer that separates the built environment from the natural. The small scale of buildings in Long Beach's "Old Town" is reminiscent of early seashore communities and thus different from other well-developed seashore communities in Washington that generally lack a distinct character.

1.1 Natural Buffer

Long Beach has a distinct form that is largely influenced by its natural setting. Framed by two long contiguous stretches of wetlands on its eastern and western edges, the city limits mirror the north-south alignment of the sand dunes that typify the Peninsula.

Decades of sand accretion have extended the western edge of the city by more than 2,000 feet from its 1889 shoreline. Since the last registration of the shoreline in 2000, the beach has widened by another 15-20'. Recent studies suggest that this accretion will most likely slow down, if not reverse, during this plan period; this should be carefully monitored and planned for.

The beach area is not necessarily flat; several dune sequences have created interim swales that collect floodwater from storm surges as well as rainwater during heavy downpours. These wet areas, or wetlands, provide habitat to a variety of marine life and shore birds. The sand dunes are a part of a larger integrated shifting dune system that extends north along the shore.

Over the years, the older dunes have been vegetated by shore pines and dune grass. Many sections have been cleared to provide a view of the ocean from developments further inland, creating an inconsistent edge and experience from the ocean. The regularity of dune vegetation is also interrupted by narrow streams of stormwater runoff from city roads.

The eastern wetlands are a part of the shoreline wetlands system. These drain into Willapa Bay on the east and are also fairly well-vegetated.

1.2 North-South Alignment

The central arterial that extends the length of the Peninsula, Pacific Avenue or State Route 103, runs east of the 1889 shoreline in a similar north-south alignment, following the route of the historic Clamshell Railroad. There are between 3 and 4 roads in the city that are parallel to Pacific Avenue: Ocean Beach Boulevard to the west; and Oregon, Idaho and Washington Avenues to the east. Outside the city, Sandridge Road, to the east, provides another north-south route.

1.3 Small City Grid

The city extends east-west for a few blocks across Pacific Avenue. Historic Long Beach offers a pleasant walking environment characterized by a small city grid, with well-tended sidewalks, small plazas and attractive streetscape features. A small grid pattern is critical for a "walkable" city and also helps slow down traffic. As Long Beach extended west from sand accretion, development followed. The introduction of Ocean Beach Boulevard created a new series of plats due west of the old historic settlement along Pacific Avenue. With the expansion of the beach and dunes, properties extended even further west and were subdivided. This created an unusual situation. Rather than the small walkable city grid that typifies historic Long Beach, this part of the city features narrow dead-end streets that provide access to linear subdivisions, a pattern referred to as "piano keys." In some areas along the shoreline and the eastern edges of the city, large properties stretch across several blocks, with no intermediate access.

Earlier in the 1990s, the city initiated an effort to extend the city grid and connectivity into this western edge. A new north-south road alignment, Shoreview Drive, was proposed approximately 500 feet west of Ocean Beach Boulevard. The city may require that developments along the route of the proposed Shoreview Drive dedicate right-of-way and construct their portion of the street according to the city's standards for a collector street. This currently applies to every new development permitted in the shoreline area. Several stretches of this right-of-way are already paved. It is unlikely that Shoreview Drive will stretch continuously throughout the length of Long Beach because of limitations on roads in Conservancy areas. It will, however, provide much needed access and improved walkability to areas that are being developed.

1.4 Building Form and Distribution

Long Beach is predominantly a residential community with a large number of single-family homes, plus mobile homes and recreational vehicles. The "core" of the city is a densely packed series of single (with a few double) story buildings along Pacific Avenue. Some of the two-story buildings have residential uses above, although most have office space on the second floor.

Along Ocean Beach Boulevard and further west, some developments extend a full block if not two. This creates a skyline distinguished by long indistinct buildings. This alignment also blocks view of the dunes and the ocean from buildings and streets further inland.

1.5 Village Character

Long Beach has adopted an "early seashore" architectural theme. The intention of the "early seashore" theme is to capture and reflect the architectural styles of early settlements along the Peninsula. In newer sections of town, the notion of a "contemporary seashore theme" is applied. This reflects the more modern architecture associated with the newer and developing portions of the city. The City has adopted design guidelines that require buildings to be predominantly shingled, with gabled roofs, front porches, and similar features. This is evident in the "commercial core" along Pacific Avenue as well as in the newer residential and resort areas to the west. Beyond the core, the integrity of the early seashore architectural character fades.

The city's design review program influences and directs the architectural character of buildings in Long Beach. The Design Review Guidebook and Zoning ordinance, including design criteria and densities, help to establish Long Beach's unique aesthetics and identity, and address different aspects and levels of detail of a building's design and contextual fit.

1.6 Summary

Long Beach is pursuing a niche in the eco-tourism industry. For most communities, but particularly for tourism-based locales, the city's character and ambience along with communal attitude and friendliness are its strongest selling factors and a key to a successful economy. In Long Beach, equally important is the city's ability to integrate and balance its development with its unique environment that has drawn visitors to the area since the late 1800s. Consequently, the plan and development regulations for Long Beach must place the emphasis on enhancing local character, not only for its downtown area, but throughout the community. The city's skyline from the ocean is still being formed with every new development. Experience and remarkableness of a place is created by the surrounding architecture and public spaces, in addition to programmed activities and the natural setting. Therefore, investors partnering in Long Beach's future must understand the importance of creating a sense of place, a parcel at a time.

2. EXISTING LAND USE

2.1 Population Trends

In 2006, Long Beach registered 1395 residents and ranked about 179th among cities in the State of Washington. In the past 6 years its rank has slipped from 176th indicating its proportionally slower growth rate. The 172 persons it gained since 2000 can be largely attributed to annexation (75 persons). In terms of density, at 791 persons/square mile, it ranked even lower at 214th within the state.

The average family size in Long Beach is 2.6 persons while the average size of households is about 1.9. While the family size is comparable to the rest of Pacific County, it appears that generally households in the rest of Pacific County are larger, at about 2.3 people. This may be tied to the greater number of manufacturing jobs within the county. This should be investigated further, particularly for its impact on housing. Long Beach has a larger proportion of residents who are well-educated. It also has a higher percentage of disabled residents (33%) when compared to the County (27%). This may partially account for the comparatively lower income (\$23,661 for households and \$21,266 for median family income as per the 2000 Census) levels in the city when contrasted with the County (\$31,209 for median household and \$39,302 for median family income). The lower income level can most likely also be attributed to the city's tourism-based economy, with its predominantly low-wage service jobs.

2.2 Land Use Trends

Long Beach maintains a fairly low-density ambience, with a high percentage of its area still vacant and undeveloped (22%). With another 20% dedicated as parkland and another 18% to shoreline use, Long Beach blends with the rest of the County in terms of its development. This is partially due to the fact that, prior to enactment of the Growth Management Act, much of the Long Beach Peninsula was seeing low-density development on 1 to 5-acre lots. With another 14% of the city's properties dedicated to roads, only 26% of its land area has been developed. It appears that the average Floor Area Ratio for most developments varies between 0.25 and 1.

From the existing land use map (Figure E-1) it appears that Long Beach is primarily a residential community with over 1,122 residential properties. The 2000 Census projections are close, estimating 1,293 housing units in 2006. There are about 351 multi-family units and about 34 parcels in recreational vehicle parks. This implies that with 660 households in the city, there are a large number of "second" homes, some of which are vacation rentals. Most of the residential properties average 5,000 to 7,000 square feet in area. The multi-family properties are larger and average about 10,000 square feet. There are about 24 mixed-use properties that comprise less than 0.25% of the city's land area. Since much of these are in the downtown (Old Town) area, they are small properties and average about 4,500 square feet. There has been very little industrial development within city limits. The properties zoned for industrial use are fairly large and average about 32,000 square feet. A significant

percentage of industrially zoned land is owned by the City and Pacific County, thereby precluding industrial development without a change in ownership.

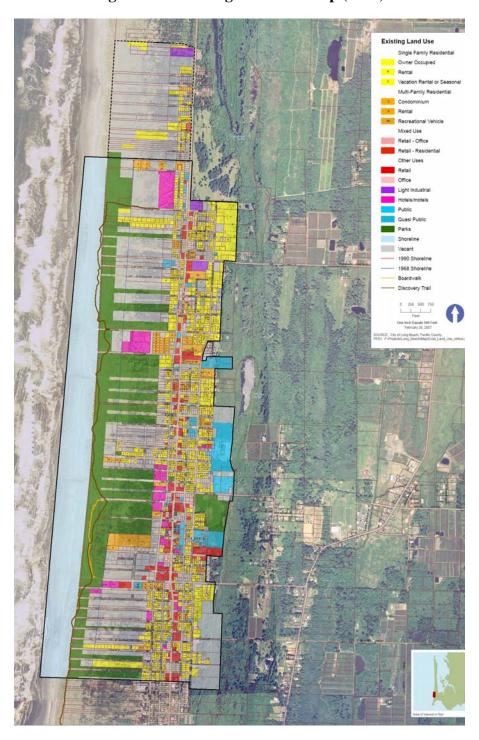


Figure E-1: Existing Land Use Map (2006)

Figure E-2: Distribution of Land Use and Parcel Sizes (2006) CITY OF LONG BEACH

LAND USE	ACREAGE	%TOTAL	NO. OF PARCELS	AVG. SIZE OF PARCEL (S.F.)
SINGLE FAMILY RESIDENTIAL	157	13%	1,013	7,000
Owner Occupied	83		487	7,423
Rental	15		84	7,793
Vacation Homes	59		442	5,784
MULTI FAMILY RESIDENTIAL	40	3.4%	163	10,690
Condominiums	3		30	4,026
Rental/Apartments	26		79	14,489
Recreational Vehicle	9		34	11,531
Mixed-Use Housing	2		20	5,139
COMMERCIAL	36.6	3%	284	5,614
Office	5		41	5,457
Retail	27		230	5,158
Mixed Use Commercial	0.6		4	5,445
Light Industrial	4		9	31,888
RESORT	27	2%	46	
Hotel/Motel	27		46	25,770
PUBLIC	23	2%	35	28,240
QUASI PUBLIC	19.7	1.7%	91	
Arts and Entertainment	1.7		13	
Church, day-care etc	16		63	
Transportation	2		15	
OPEN SPACE/ ROADS	613	52%		
Parks	231	20	158	63,696
Rights Of Way	168	14		
Beach/ Natural Area	214	18		
VACANT	255	22%	658	16,858
MISCELLANEOUS	4	0.3%		
TOTAL	1,174 ACRES		2,448 PARCELS	14,093 S.F.

Source: City of Long Beach GIS

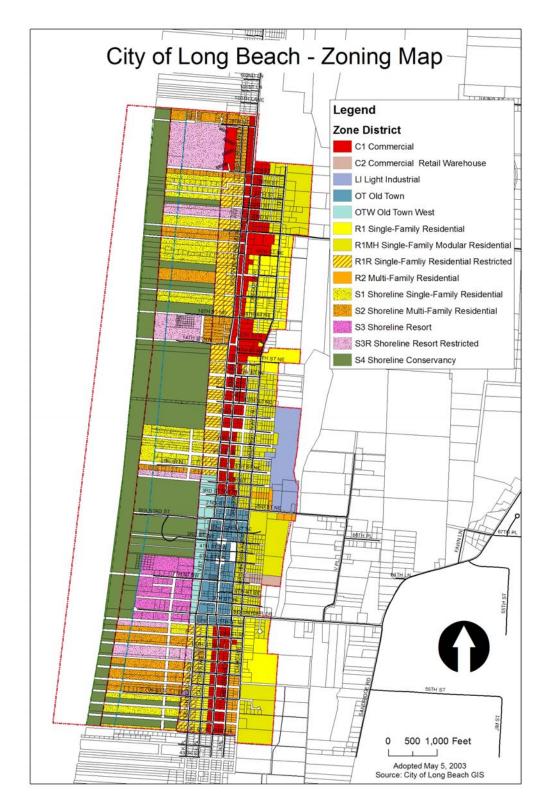
2.3 Relationship of Use to Zoning

The land use pattern in Long Beach mostly echoes the zoning regulations for the city. The uses are primarily segregated, with minimal mixed-use districts. Almost all the commercial uses are along Pacific Avenue, while single family residences are located east and west of the highway. There is a large pocket of industrial land on the east that is primarily used by the City of Long Beach sewer treatment plant and Pacific County. A few other zoning categories, the Old Town and the Old Town West Districts, support a mixture of uses that range from predominantly visitor-serving retail and hotels to a smattering of offices and public uses. Fingers of the Shoreline Single-Family and Shoreline Multi-Family Residential Districts extend into the Shoreline Conservancy District. Most of the city's vacant land is in these districts. The Shoreline Resort District lands are also surrounded by Conservancy District lands, and are the primary location of itinerant lodging.

Figure E-3: Distribution by Current Zoning

EXISTING ZONING	ZONING DESCRIPTIONS	TOTAL (ACRES)	% TOTAL
C1	Commercial District	69.70	6%
C2	Commercial Retail Warehouse District	3.31	0%
L1	Light Industrial District	25.07	2%
OT	Old Town	34.45	3%
OTW	Old Town District West	13.08	1%
	COMMERCIAL	145	12%
R1	Single Family Residential	65.37	6%
R1MH	Single Family Modular Residential	109.63	9%
R1R	Single Family Residential Restricted	46.58	4%
R2	Multi-family Residential District	8.16	1%
S1	Shoreline Single Family Residential	67.39	6%
S2	Shoreline Multi Family Residential	67.82	6%
RESIDENTIAL		365	31%
S3	Shoreline Resort District	33.72	3%
S3R	Shoreline Resort Restricted District	57.02	5%
RESORT		91	7.8%
S4	Shoreline Conservancy District	210.97	18%
ROW	Rights-Of-Way	148.00	13%
BEACH	Beach/ Natural Area	214.00	18%
OPEN SPACE/ ROADS		573	49%
	1,174		

Figure E-4: Zoning Map (2006)



It is apparent that between all the commercial districts (C1, C2, L1, OT, OTW), commercial zones occupy about 12% of the city's total land area. If only developable properties are considered and rights-of-way, shoreline and shoreline conservancy zones are excluded, then the same commercial areas account for almost 24% of developed area. However, only 50% of the city's land can be counted in the developable category since the Conservancy Zone and the Beach contribute to about 36% of the city's land area, with rights-of-way contributing to another 13%.

2.4 Residential Land Use Trends

Residential land accounts for about 13% of the city's area. At the time of the 1999 Comprehensive Plan, single family residences represented about 81% of the housing stock. Currently, a land use reconnaissance shows that there has been a greater interest in single family homes (not including recreational vehicles) over the past 7 years, such that they now represent about 86.7% of the housing stock and a total of 1,013 properties.

2.5 Commercial

Properties on either side of Pacific Avenue allow and are developed for commercial purposes. They create a cohesive core around Bolstad Avenue. Some of these developments are double story with offices on the upper floors. Most, however, are single story and predominantly retail. There are a few offices, auto repair shops, banks and such outside the Old Town District. Further north, there is a concentration of stores related to home improvement (paint, hardware, etc.) and a tight neighborhood commercial node at 9th Street North. It is evident that fewer commercial establishments outside the core adhere to a rigorous architectural expression. Furthermore, many have their parking adjacent to Pacific Avenue, the main thoroughfare through town, and are interspersed with vacant properties, thus weakening the distinctiveness of the commercial experience in town.

2.6 Light Industrial/Intense Commercial

There are no heavy industrial uses within Long Beach city limits. There are several properties used for "intense commercial". Some of these are zoned C2 Commercial Retail Warehouse (a lumber yard) and some C1 Commercial (self-storage and a bottling plant). There are no privately-held vacant properties that currently allow industrial uses (LI Light Industrial zoning). Pacific County offices on 2nd Street N may be vacated in the future. If so, that property may become available for private industrial development. The City is the largest landholder of industrially zoned property. While a small portion of this is currently in use for a sewage plant and offices, it is prudent for the city to retain all of its property to allow for expansion of this facility in the future.

2.7 Institutional/Public

Currently there are no official zones for public uses. Therefore, public facilities have been constructed in lands zoned for either industrial, single family or commercial uses. Public uses are generally concentrated within blocks of the Old Town area.

2.8 Vacant Land

Records from show that in 1996 there were a large number of properties within city limits that were zoned for some type of development and were undeveloped. In 2006, GIS data shows that approximately 252 acres or 22% of the area within the city is vacant (Figure J-3). Much of this land comprises large linear shoreline properties. Development on these properties is regulated not only by city review but has to adhere to strict state shoreline master program regulations. Several large vacant properties at the eastern extremities of town offer more flexibility in site planning. However, they too have large stretches of wetlands. Any development in these properties will also have to adhere to regulations for wetlands mitigation.

2.9 Rights-of-Way

Estimates show that nearly 14% of the city's land has been dedicated to roads and public rights-of-way. Long Beach was originally platted with 50-foot street rights-of-way. From 4th Street N to 13th Street N, the east-west streets were platted at 75 feet wide. Over the years, however, the city has sold some rights-of-way so that most of these streets now measure 50 feet. North of Pioneer Road, 22nd to 26th Streets are 40 feet wide. The city has been requiring that property owners adjacent to Shoreview Drive dedicate 60-foot rights-of-way with the intentions that one day this would provide relief to traffic navigating through the few north-south streets in town. There are several narrow rights-of-way. For instance, 2nd Street S is 16 feet, 4th Street S is 20 feet, 6th Street S is 10 to15 feet and 8th Street SE is 25 feet wide. There has been no discussion of the city purchasing additional right-of-way along these streets and in fact, some have been converted to east-west pedestrian connections with public amenities such as picnic tables and benches.

2.10 Density Distribution

Multi-family units are scattered throughout the city. Most of these are apartments and lie west of SR 103, though there are several smaller properties east of SR 103 in no specific pattern. Existing condominium complexes are also randomly located within the city. Hotels and motels, too, have sprung up west of the highway, with a few small properties south of 5th Street South lying east of SR 103. Most of the large buildings in the city are hotels or condominiums. Within the Shoreline Resort District, these facilities tend to be 4-5 stories tall. The seasonal nature of the lodging industry has recently prompted several property owners to convert their facilities to condominiums or vacation rentals, including time shares. There are about 24 properties that comprise a mix of uses (mixed-use). Some of these have retail on the ground floor with a floor of offices above. These also occur randomly along the highway. About 20 properties have housing above retail.

There are two apartment complexes in the city that have income requirements for occupancy and are generally considered "affordable housing." One is a senior facility. Anecdotal evidence suggests that many residents seeking lower priced homes find options outside city limits. Recreational vehicle parks also offer a higher concentration of density, but unlike other multi-family options in the city, they

support a lower cost of living. Therefore, they are important in providing affordable housing to the city's lower income residents. There is less availability during peak season, however, when spaces are more likely to be rented nightly. Trends elsewhere suggest that as development picks up, these parks are heavily targeted for replacement by more expensive or higher density residential or commercial development.

2.11 Summary of Issues

Land use distribution in the city follows the zoning layout fairly consistently. There are only a few instances of "spot" zoning that could (though are not known to) create incompatibility between adjacent properties. Despite the development interest in the Peninsula as a whole, there are many properties within the city that are still vacant or underused. This could imply inconsistencies between the distribution of zoning, market realities and severe environmental limitations to development, among other factors. There are also few opportunities for multifamily units. These will become more desirable to accommodate not only the lower-income population that supports a tourist economy, but also a higher concentration of the elderly, many of whom seek assisted care living options.

3. HOUSING

3.1 Owner Occupied Units

The 2000 Census shows that only 57% of all housing units were occupied in Long Beach. It can be implied then that the remaining 43% are second homes or vacation rentals of some kind. This number corroborates with the information in the city's GIS database. The city's database was developed through a site reconnaissance of every property in the city by City Staff during the course of this project. Of the occupied units, about 56% were owner-occupied.

The City has prepared a map that shows existing land uses (see Figure E-1, page E-5). In this map, single family homes are distinguished between owner-occupied (487), rental (84) and seasonal (442). The same level of information is not available for multi-family units, though it is known that of the 143 multi-family properties most are rentals (79) and about 30 are condominiums and 34 are in recreational vehicle park use.

3.2 Housing Values

The 2000 Census indicates that the median housing value in Long Beach was \$109,000. Property values have risen since then, and the median home price in 2006 was approximately \$170, 500.

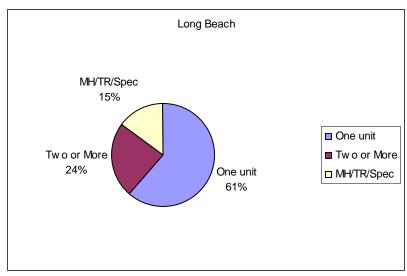
3.3 Housing Market

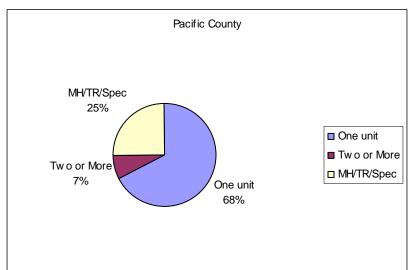
Long Beach currently has a mixed supply of housing product, including single-family residential, multi-family, owner-occupied, seasonal, and rental. According to numbers from the Office of Financial Management, Long Beach tends to have more multi-family housing than the rest of Pacific County, as shown in Figure E-5. Part of the explanation for this trend toward more multi-family housing is the demographics of the residents of Long Beach, as well as the vacation and second-home market. As noted earlier, Long Beach has a higher proportion of older adults which may mean more "empty nesters" seeking a respite from house and yard maintenance.

Figure E-5: Housing Units by Structure Type

Long Beach and Pacific County

April 1, 2005 Estimate





^{*} MH/TR=Mobile Home/Trailer: Fifteen to 20 percent of the mobile homes and house trailers in Washington are usually classified as single family houses in the decennial census.

Source: State of Washington Office of Financial Management.

^{*} Spec= Special: Unusual living quarters not generally considered a housing unit (e.g. boats, boxcars, tents, recreational vehicles, etc.). Only counted when occupied by person meeting "resident" criteria.

The Office of Financial Management prepared coordinated county-level population projections for every county in the state of Washington, to help meet GMA requirements. According to the intermediate forecast, the state is expected to grow in population to nearly 8 million in the state by year 2025. Pacific County, with just under 21,000 people in 2000, is expected to experience modest growth, reaching an estimated 22,678 by year 2025. (See Figure J-1: Projections of Total Resident Population for the Growth Management Act.)

3.4 Household Incomes and Suitability of Housing Product

The disposable income of a household determines whether that household is able to make certain choices about its housing. Obviously, households with very limited income are less able to afford single-family housing and are especially out of reach of higher-priced housing. One concern in providing housing is the current lending criteria of for-sale units. The mortgage lending community has developed income requirements for various loan amounts. The elements that go into these calculations include:

- Ratios of income to total monthly housing costs
- Mortgage terms
- Down payment capability and financial condition
- Credit history

The ability to make a larger down payment lowers the income threshold, but few lower-income households possess the resources to make larger down payments. The remaining households must either purchase from the established inventory of lower-cost housing in the area or rent an apartment or single-family house, as their means allow. Further, most lower-cost housing consists of older mobile homes, for which lending is not readily available. Housing is typically considered affordable when housing costs (rent or mortgage payment, utilities, insurance, taxes, etc.) do not exceed 30% of the gross annual income of a household.

The median household income in the City of Long Beach in 1999 (from the 2000 census) was \$23,611. At maximum loan and under standard lending conditions, this income level would be adequate to purchase a home valued at approximately \$80,000. Again, according to the 2000 census, the median value of an owner-occupied single-family home in 1999 was \$109,600, putting homeownership out of reach for the majority of households in Long Beach.

Admittedly, these figures from 1999 are somewhat dated. For a more recent illustration, the Federal Financial Institutions Examination Council (FFIEC) provides estimates of family income for year 2006 by census tract. The FFIEC estimates this area's 2006 family income at \$37,956. This compares to the Census' median household income in 1999 for the City of Long Beach of \$23,611, suggesting that newcomers bring increased buying power to the area.

Figure E-6: Households of Long Beach by Household Income (1999)

Source: U.S. Bureau of the Census.

The Long Beach real estate market is tracked by two multiple listing services: the Realtors' Multiple Listing Service (RMLS) and the NorthWest Multiple Listing Service (NWMLS). Between these two listing services, there were a total of 42 residential properties sold between January 1 and October 26, 2006. Ranging from \$66,600 to \$532,500, these sales averaged \$195,550 with a median of \$170,500. (See Figure J-2) These price levels would require a monthly income of about \$4,500 or more, about 40 percent more than the FFIEC estimated family income. With these income levels and price points, affordability of suitable workforce housing is a concern. So, though household incomes have increased somewhat, housing prices have increased at a greater pace, keeping housing out of reach for many Long Beach residents.

One factor affecting the cost of housing is the presence of second homes. The housing market is comprised of people who want to buy homes in Long Beach, whether primary homes, second homes, or retirement properties. One concern is that the second-home buyers with more disposable income are driving up prices, making the market unaffordable for households searching for primary homes. According to the FFEIC-updated census information, the 1,169 housing units in Long Beach include 365 owner-occupied units, 319 renter-occupied units, and 485 vacant units. Presumably, a large number of the vacant units are seasonal residences, rather than vacant units currently on the market.

As noted earlier, the composition of the housing stock in Long Beach reflects more multi-family housing units than the rest of Pacific County. It may be possible to channel some of the second-home market toward condominiums and other forms of multi-family housing, taking advantage of the population in-migration to Long Beach.

These in-migrants tend to be in the older age cohorts, who may welcome a respite from yard and home maintenance.

3.5 Summary of Issues

Over the past decade, the cost of housing in Long Beach (along with the rest of the state) has soared. While this has created opportunities for financial windfalls, this has severely limited options for starter homes for first-time buyers and the elderly or the physically challenged. Several trends in Long Beach will need to be taken into account as the city develops its housing policies. First, as the city creates an economy based on tourism, it will need to work in partnership with local hotels and businesses to create options for these workers to live within city limits. Otherwise, the cost of this development is passed onto the regional community as they then have to address the traffic impacts of a larger commuting population and associated parking. Secondly, to retain local population, it is important that the city encourages multigenerational housing options, including those that will cater to the aging population such as assisted living care facilities. Lastly, while a large seasonal home portfolio caters to generally wealthy non-resident investors and appears to be fiscally beneficial to the city, it takes a toll on the city's livability and affordability by driving up the price of homes beyond the range of families and smaller households seeking to live in the city. There appears to be a growing appetite for multifamily condominiums that cater to the temporary or seasonal resident. Appeasing this market demand will need to be balanced with the need for short-term hotels that will bolster the local tourism economy.

4. ENVIRONMENT

4.1 Topography

The City of Long Beach is located in the southwestern corner of the State of Washington, along the Pacific Ocean and to the north of the Columbia River. It is situated near the south end of the Long Beach Peninsula in Pacific County. To its immediate south is the unincorporated area of Seaview, with the city of Ilwaco another mile further south. The city of Long Beach is on relatively flat, sandy ground, stretching from the dune area on the west to a chain of lakes on the east. The elevation ranges from sea level to 25 feet, with a mean tidal range of 8.1 feet. Towards the west the wetlands lie at an average of 13 feet above sea level. The grade rises to about 15 feet along Pacific Avenue (SR 103).

4.2 Climate

The climate in Long Beach is characterized by cool, relatively dry summers and moderate winters with considerable rainfall. The annual rainfall is around 80 inches. Rain averages about 9-12 inches per month from November through March and in the range of 2-6 inches for the rest of the year. The mean monthly temperatures vary from 40°F in January to nearly 60°F during summer. The average daily maximum for summer is 66°F with the highest temperature ever recorded at 95°F. During the winter the average daily minimum is about 36°F. The lowest temperature on record is 9°F.

4.3 Wind Characteristics

The prevailing wind direction for Long Beach is generally easterly for most of the year, with northwesterly winds prevailing during the summer month. (See Figure E-7) While the monthly averages are modest, occasional gales can reach up to 50-100 miles per hour during winter months.

J F J J S o Ν D M A \mathbf{M} A Astoria, OR E E Ε S W W NW NW NW E Е Е 7.8 7.8 7.8 9.2 8.8 8.5 7.8 7.8 8.1 7.3 6.8 6.8 E Е E W W W W W W E E E Hoquiam, WA 11 11 10 9.6 9.4 9.2 8.1 7.7 8.5 11 8.6

Figure E-7: Wind Data, National Oceanic Atmospheric Association

The Department of Energy's Wind Program and the National Renewable Energy Laboratory (NREL) shows wind speed estimates at 50 meters above the ground and grades them for utility-scale wind development. As a renewable resource, wind is classified according to wind power classes, which are based on typical wind speeds. Wind power classes range from Class 1 (the lowest) to Class 7 (the highest). In general, at 50 meters, wind power Class 4 or higher can be useful for generating wind power with large turbines. Class 4 and above are considered good resources.

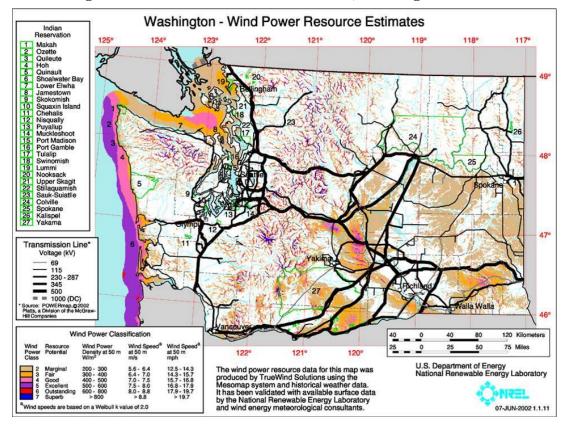


Figure E-8: Wind Resources at 50 meters, Washington State

Source: www.eere.energy.gov

Wind Speed at 50 Meters

Wind Speed at 50 mete

Figure E-9: Wind Speeds at 50 meters, Washington State

Source: Northwest Sustainable Energy for Economic Development (NWSEED).

Long Beach is categorized as a Class 3 area and has potential to generate higher wind power class values at 80 meters than shown on the 50 meter map because of possible high wind shear. Given the advances in technology, a number of locations in the Class 3 areas may suitable for utility-scale wind development. It is also evident that wind resource potential improves dramatically further away from the mainland.

4.4 Critical Area Ordinance Update Critical Areas Ordinance (CAO) Update

Environmentally sensitive areas such as wetlands, frequently flooded areas, geologically hazardous areas, fish and wildlife habitat conservation areas, and groundwater aquifers are termed "critical areas" under the Washington Growth Management Act (GMA). Critical areas are especially vulnerable to development and its impacts. The GMA requires local governments to protect the natural "functions and values" of these areas. Wetlands are areas that may be either permanently or seasonally inundated by water and comprise the single most significant critical area in Long Beach. Wetlands provide a number of important functions, including fish and wildlife habitat and flood storage. Most wetlands in the City are associated with the city's oceanfront dune system; there are also substantial wetlands to the east of the city. Development that may impact wetlands or other critical areas is regulated by the City's Critical Areas Ordinance or CAO. The CAO protects wetlands by establishing

-

www.eere.energy.gov; Wind Powering America

setbacks and mitigation requirements for new development based on the size and type of the wetland.

Beginning in 2002, every county and city planning under the Growth Management Act (GMA) is required to review and update its comprehensive plan and associated development regulations (including critical areas ordinances) every seven years. Deadlines to complete review and updates to the critical areas ordinance vary throughout the state. The deadline for Pacific County and Long Beach is December 1, 2008.

Key requirements for critical area ordinance updates include:

- Utilize "best available science" to protect critical area "functions and values."
- Wetlands must be delineated according to the Washington State Department of Ecology Manual.
- Address no net loss of ecological function.
- Update critical area inventories by maximizing available information and resources.
- Review the CAO and zoning regulations for consistency with other policy and regulatory documents.
- Provide opportunities for public and agency involvement throughout the update and adoption process.

4.4.a. Wetlands

Wetlands are the most predominant critical area in Long Beach. They provide important functions for both the natural and the built environment, including:

- Flood attenuation and stormwater retention
- Erosion protection from wind and storm surges
- Fish and wildlife habitat
- Aquifer recharge
- Water quality protection
- Recreational resource

The Critical Areas Map (Map A-3: Development Parameters Map) indicates that the city is bordered on both its east and west by wetland systems. To the west of Ocean Beach Boulevard are scattered small "interdunal" wetlands associated with the coastal dune complex. To the east of the city is a chain of freshwater wetlands that runs through the interior of the peninsula, comprised of a complex and interconnected series of open lakes, sphagnum bogs, mature forested wetlands and large sedge meadows. The wetlands to the east of the

city provide some of the most significant wildlife habitat found anywhere on the Long Beach Peninsula. Most of these wetland systems, however, occur outside the city's eastern limits.

The City conducted a wetland inventory of "interdunal" wetlands located between the shoreline and Ocean Beach Boulevard as part of the *Dune Management Report*, prepared in 2000 in collaboration with the Washington Department of Fish and Wildlife, Washington Department of Ecology, US Army Corps of Engineers, and other agencies. That survey indicated the presence of more than 70 acres of wetlands in the coastal dune complex. Most of these wetlands are small—three-quarters of them are less than 0.25 acres in size. The distribution of interdunal wetlands is shown in Figure E-10.

Figure E-10: City of Long Beach Interdunal Wetlands

WETLAND SIZE	NUMBER	PERCENT OF TOTAL	ACRES	PERCENT OF TOTAL
<0.10 Acre	98	52.4%	4.6	6.5%
0.10 to 0.249 Acre	43	23.0%	7.3	10.3%
0.25 to 0.499 Acre	17	9.1%	5.7	8.0%
0.50 to 0.99 Acre	14	7.5%	9.8	13.9%
1.0 Acre to 4.99Acres	13	7.0%	29.0	40.9%
>4.99 Acres	2	1.0%	14.5	20.4%
TOTALS	187	100%	70.9	100%

Source: Dune Management Report, March 2000

These interdunal wetlands are mostly located in shallow sandy swales and contain seasonal standing water caused by the high groundwater and high rainfall on the coast, which averages 80 inches annually. These wetlands are relatively *small*—only two individual wetlands are larger than five acres in size—*isolated*—they do not comprise an interconnected wetland system like the forested wetland systems in the interior of the peninsula and *young*—having formed in the last fifty years as the seashore accreted and the dune complex grew. For these reasons they tend to provide less value for fish and wildlife habitat compared to the interior wetlands.

More than one-half of the total wetland acreage (36.5 acres) is protected within the Shoreline Conservancy zone. Approximately 19 acres are located within the Shoreline Residential zone and 16 acres are in the Shoreline Rural & Urban Resort zones. A significant portion of the Shoreline Residential jurisdiction parcels remain vacant. This

may be due to the cost and feasibility of developing these parcels due to the presence of wetlands as well as lack of existing roadway access. However, most of the city's vacant land lies in these areas, so as demand for new homes grows, and given the desirability and amenities of the shoreline properties, development can be expected to increase.

All the City's wetlands are classified as freshwater (not tidal influenced) palustrine systems according to the U.S. Fish and Wildlife Service Wetland Classification System. They are generally grouped into the following wetland classes:

- *Emergent*—wetlands dominated by herbaceous vegetation (i.e., grass or grass-like plants)
- *Emergent/Scrub*—these wetlands are dominated by herbaceous vegetation with small patches of woody plants present
- Scrub—wetlands dominated by woody vegetation

The distribution of wetlands according to wetland class is shown in Figure E-11. The single-largest class is scrub wetlands comprising more than one-half of all wetlands.

WETLAND TYPE NUMBER PERCENT OF PERCENT OF ACRES **TOTAL TOTAL** 120 64.2% 22.4 31.5% Emergent 15 7.8 **Emergent-Scrub** 8.0% 11.1% Scrub 52 27.8% 40.7 57.4% 187 70.9 **TOTALS** 100% 100%

Figure E-11: City of Long Beach, Wetland Types

Source: Dune Management Report, March 2000

The City amended its *Shoreline Master Program* (SMP) in 1997, incorporating several recommendations from the *Dune Management Report* related to wetland protection. The City adopted new wetland buffers and wetland impact mitigation procedures. The City's new wetland buffers are shown in Figure E-12. These buffers were recommended by professional biologists from the Washington Department of Fish and Wildlife as well as the Washington Department of Ecology.

Figure E-12: City of Long Beach, Existing Wetland Buffers

WETLAND SIZE	BUFFER	% OF TOTAL WETLAND ACRES
<500 sq. ft.	NO BUFFER REQUIRED	7%
500 sq. ft 0.25 acre	25 FEET	10%
0.25 acre and larger	50 FEET	83%

Source: Long Beach Shoreline Master Program

The City also adopted buffer averaging and mitigation sequencing to protect wetlands as well as compensatory mitigation for impacts such as filling or excavation, after implementing mitigation sequencing. Mitigation sequencing is a procedure whereby, if wetland alterations are proposed as part of a particular project, the following mitigation sequence should be used to evaluate those proposed wetland alterations:

- Avoid the impact by not taking a certain action or parts of an action;
- Minimize impacts by limiting the degree of magnitude of the action by using appropriate technology, or by taking steps to avoid or reduce impacts;
- Rectify the impact by repairing, rehabilitating or restoring the affected environment;
- Reduce or eliminate the impact over time by maintenance operations during the life of the project;
- Compensate for the impact by replacing or providing substitute resources or environments; and/or
- Monitor the impact and take appropriate corrective measures.

The SMP now prohibits filling or excavating wetlands in the Conservancy and Natural zone, unless needed to maintain or improve existing roads, trails or other structures. Any unavoidable loss of wetland or buffer areas in the Conservancy zone will require compensatory mitigation.

In the Residential and Rural/Urban Resort shoreline zones, no compensatory mitigation is required for impacts to small wetlands less than 500 square feet in size, provided the cumulative wetland impacts (e.g., filling several small wetlands as part of a single project) do not exceed 500 square feet. If the impact exceeds 500 square feet,

mitigation will be required². Generally, in the shoreline Residential zone, compensatory mitigation for impacts (filling or excavation) to wetlands 500 sq. ft. in size or larger (individually or cumulatively), is required after mitigation sequencing has been satisfied (at a ratio of 1.5:1). In the shoreline Rural/Urban Resort zone, mitigation may include preserving coastal dune habitat (at a 3:1 ratio) and/or preserving high quality wetlands elsewhere on the Long Beach Peninsula (at a 6:1 ratio). Preservation of wetlands in these cases requires recording of a perpetual conservation easement or transfer of ownership to the city or state. Off-site wetland improvements must be approved by the Washington Department of Ecology (DOE) and the U.S. Army Corps of Engineers.

4.4.b. Frequently Flooded Areas

Flood events in the city are related to winter storm events and combinations of high tides and high groundwater table. Localized flooding is primarily limited to the dune complex, forested wetlands and adjacent areas. (See the Development Parameters Map, Map A-3.)

4.4.c. Geologically Hazardous Areas

There are no designated geologically hazardous areas in the city such as steep slopes or areas highly susceptible to erosion away from the shoreline. Nevertheless the sandy soils underlying the city may be subject to liquefaction in a severe earthquake. The *Dune Management Report* indicates that the approximate 25-foot MSL height of the primary seashore dune is likely to protect the city from a "far source" tsunami. However, a near-shore-derived tsunami could inundate the entire city, indeed most of the Long Beach Peninsula. Pacific County emergency management procedures direct evacuation to upland assembly areas along 67th Place in the low-lying hills directly east of the city.

4.4.d. FISH AND WILDLIFE HABITAT CONSERVATION AREAS

There are no designated priority, threatened or endangered species habitat within the city according to the Washington Department of Fish and Wildlife.

4.4.e. AQUIFER RECHARGE AREAS

The groundwater aquifer underlying the city is a relatively shallow unconfined aquifer subject to saltwater intrusion. The city relies on

-

² See SMP Regulation 10.21 for detailed description of mitigation/preservation options for property developers. Mitigation requirements are based on the proposed use and/or location of the property relative to particular Seashore Conservation Lines.

surface water sources for its potable water supplies; groundwater is not a potable water source for city residents. However, residents in some surrounding unincorporated areas do depend upon groundwater for some of their water supply, so protection of the aquifer remains important.

4.5 Shoreline Master Program (SMP) Update

The oceanfront shoreline along the City's western border is part of a coastal dune system that provides important ecological functions and values as well as being an integral part of the city's economy. This area is designated by the State's Shoreline Management Act (SMA) as a "shoreline of state-wide significance." Development along the oceanfront is managed by the City's Shoreline Master Program or SMP. The SMP is essentially a land use plan and zoning code specifically for the shorelines. The SMP regulates setbacks for new development from the shoreline as well as the density, intensity and types of uses allowed there.

The City is experiencing increasing residential growth as well as an expanding tourism-based economy. The City must balance the demand for future growth as required by the GMA while still protecting the coastal dunes as required by the SMA.

The Shoreline Management Act (SMA) charges the Washington State Department of Ecology (DOE) with the task of preparing guidelines for local jurisdiction implementation of the SMA. The Shoreline Master Program Guidelines provide standards and guidance that local governments must follow in drafting their local Shoreline Master Programs (SMPs). In December 2003, DOE adopted new, revised SMP Guidelines. Local governments are required to review and update their existing Shoreline Master Programs consistent with the new DOE guidelines. Key objectives of the new DOE Shoreline Guidelines that must be considered include:

- Restoration of impaired shoreline "function" through comprehensive planning and voluntary implementation;
- No net loss of ecological function;
- Management of critical saltwater habitats;
- Protection of archaeological and historic resources;
- Critical Areas and flood hazard reduction;
- Public access to shorelines:
- Shoreline vegetation conservation; and
- Water quality, stormwater and non-point pollution.
- 4.5.a. GENERALIZED REQUIREMENTS FOR THE SMP UPDATE
 - Provide opportunities for public involvement (e.g., workshops, hearings, etc.).

- Inventory and characterize the shoreline landscape by maximizing use of available information and resources.
- Integrate shoreline policies and regulations with parallel planning efforts and development regulations.
- Identify and document ecological "functions and values" of shorelines.
- Coordinate shoreline restoration planning with current restoration programs and efforts (e.g., Dune Management Report).
- Evaluate and update shoreline designations, policies and development standards.
- Conduct a cumulative impact analysis of potential affects to shoreline ecological functions based on future growth projections and predicted development demands.

The City's comprehensive SMP update (under the new guidelines) must be completed by 2014. DOE provides funding for comprehensive updates consistent with the new guidelines. However, since the city is conducting a comprehensive (GMA) plan update now, it—by necessity—needs to consider shoreline and SMP issues as part of that planning process. The full SMP update—consistent with the new guidelines—requires a more significant effort, including an updated inventory and analysis of shoreline ecological functions, humaninduced impacts and shoreline restoration activities and programs. That work will be completed closer to the 2014 deadline and with DOE-funded assistance. However, jurisdictions may make interim or "less than comprehensive" amendments to their SMP's prior to their scheduled due dates for full compliance with the new guidelines. However, significant changes (as determined by the DOE) to the SMP anticipated by a jurisdiction prior to its scheduled SMP update compliance date (in the case of Long Beach, 2014) may trigger the requirement for a "comprehensive" update under the SMA—meaning that the city must fully comply with all the new guidelines, now. For Long Beach, shoreline planning is closely integrated with (and often inseparable from) its long-range GMA planning requirements. Depending upon the type and nature of changes contemplated by the comprehensive plan update, the SMP may need to be modified to maintain consistency with GMA/SMA planning requirements. But such changes should be limited to strengthening policies and regulations or other streamlining or comprehensive plan consistency revisions so as not to trigger the "comprehensive" SMP Update requirement significantly in advance of the 2014 due date.

The city identified consistency issues between the SMP, the comprehensive plan update and the city's adopted development regulations to ensure that any proposed SMP amendments that arose out of the planning process fell within the "less than comprehensive" category of amendments envisioned by the DOE. Potential revisions to the SMP addressed during the planning process that appear to meet the "limited" SMP amendment criteria include:

- Updating the SMP to clarify policy language that allows for existing platted roads to be improved in the conservancy designation;
- Extending coverage of SMP wetland policy and regulatory protection to affected but un-mapped SMA-jurisdictional wetlands east of the city which are within the City's jurisdiction;
- Revising SMP shoreline use regulations and policies, as applicable, to maintain consistency with adopted city policy and "upland" zoning regulations and designations; and
- Monitoring the continued research in the Southwest Washington Coastal Erosion Study (SWCES) and coordinate with affected state and federal agencies to ensure adequate seashore protection for Long Beach.

4.5.b. SHORELINE FEATURES

According to records from the state of Washington, from 1889 to 2000, the city's shoreline has grown westward by approximately 2,000 feet due to accretion. This is the result of sand being transported in the "littoral cell" or current, which is deposited along the shoreline of the Long Beach Peninsula. In general the littoral current runs northerly in the summer months and reverses course in the winter. Over the past fifty years, the rate of accretion has averaged between 20-30 feet annually. This rare process has increased the city's size significantly but also presents a challenge to manage the expanding seashore in a manner that protects its natural functions and values under the SMA.

European dune grass was introduced in the 1930s to stabilize the blowing dunes along the peninsula. Combined with the accretion process and steady supply of new sand, a coastal dune complex has evolved that is unique to the state. Today that shoreline is characterized as a dune and swale landscape. The character of the dune complex is shaped and influenced by wind, water, vegetation and availability of sand.

The landscape is characterized by several distinct seashore landforms:

- Fore or Primary Dune (the highest and first dune off the beach; up to 25' above mean sea level; it traps the most and largest sand particles);
- **Swale Depressions** (on the back-side of the dunes; subject to lower wind velocity where sediment transport diminishes; high rainfall and high groundwater result in seasonal wetlands);
- Back Dunes or Hummocks (smaller dunes than the primary dune as wind velocity diminishes further away from the shore and less sand is wind-borne); and
- **Deflation Plains** (farthest away from the shore; wind diminishes to a point that sediment transport ceases; colonized by scrub wetlands, shore pines and other upland vegetation).

The seashore/dune complex provides important natural as well as economic functions and values, including:

- Fish and wildlife habitat (the fore dune and beach environments provide the most significant wildlife habitats within the larger coastal dune complex);
- Groundwater recharge (porous sandy soil and pervious surfaces allow for rapid groundwater recharge);
- Water quality protection (filters and traps contaminants that could pollute the groundwater aquifer);
- Stormwater retention (absorbs and retains stormwater runoff that might otherwise contribute to localized flooding);
- Storm surge buffers (the primary dune and smaller back dunes provides buffers to absorb storm surges; elevation of the primary dune generally exceeds the elevation of winter storm surges and "far source" tsunamis);
- Erosion protection (acts as a buffer to wind and wave energy-induced erosion);
- Recreation (provides the most significant source of tourism and economic development generated incomes on the Long Beach Peninsula); and
- Aesthetics (the beach and dunes provide natural open space for residents and visitors).

The beach and coastal dunes provide a high value complex ecosystem. Preserving the integrity of this ecosystem should be the key consideration in shoreline planning and management. Indeed, the natural forces that shaped the peninsula are ever-changing. It is not a static place. Recent data from the DOE suggests that the seashore

accretion process may have ended and acute erosion or loss of shoreline has been experienced in the last several years on the peninsula. The Washington DOE, in cooperation with the U.S. Geological Survey and the U.S. Army Corps of Engineers, is continuing to study the alongshore transport of sediment along the southwest Washington coast. This research is referred to as the Southwest Washington Coastal Erosion Study (SWCES). The SWCES will help to explain the complex natural roles and processes of currents, wind patterns, wave energy, and sediment loading along the coast, including assessment of the human-induced impacts on these processes.

Research to date indicates several important findings from the SWCES. Chief among these is that the supply of sand from the mouth of the Columbia River that feeds the beaches of the Long Beach Peninsula has diminished significantly since construction of the upriver dams. The dams effectively reduce the supply of natural sediments transported by the river to its ocean mouth. This has been offset to some extent by active dredging of the Columbia River ship channel. Sand and sediments are dredged to maintain a deep-water channel for trans-oceanic shipping. However, dredged sand supplies are not sustainable and cannot replace the volume of sand formerly deposited at the mouth of the river.

The SWCES notes that "...As the sand supply to the Long Beach Peninsula declines, the southern portion of the peninsula is predicted to undergo net shoreline recession. The coast cannot maintain its existing configuration without the continued supply of sand... The SWCES beach morphology monitoring program has in fact revealed net shoreline recession along the southern Long Beach Peninsula since the program began in 1997... [N]et shoreline retreat along the southern Long Beach peninsula [is] inevitable in the coming decades."

Depending upon the future rate of sand supply and sand replenishment strategies, the SWCES predicts that the City of Long Beach could lose up to a quarter or more of its accreted shoreline within the next 50 years. The City will continue to coordinate with the DOE and Pacific County to undertake studies and develop sustainable sand replenishment strategies for the Long Beach Peninsula.

4.5.c. EXISTING SHORELINE MASTER PROGRAM LAND USE PLAN

There are three primary shoreline environment designations that apply to the city's shoreline jurisdiction: Conservancy, Residential and Resort (Rural & Urban), the boundaries of which are described in the Shoreline Master Plan.

Conservancy — This designation applies to natural areas deemed not suitable for urban development. No residential or commercial development is allowed. Allowed development is limited to public access and public facilities. The Conservancy environment is the largest land use designation in the city's shoreline environment. It comprises approximately 226 acres of all lands within the shoreline jurisdiction. More than half of the interdunal wetlands are protected in this category. Note that the Conservancy shoreline designation applies to the primary dune and westward to include the beach and the near-shore ocean environs.

Residential — This designation allows for single and multi-family development, including condominiums. No commercial development is allowed. Residential designation applies to 144 acres of shore lands in the city. The maximum building height is 35 feet. Areas within this zone are designated for either single family development (S1) or multifamily development (S2).

Rural & Urban Resort — These designations allow the most intense development within the shoreline jurisdiction. Together, they comprise 95 acres of shore lands in the city. Allowed uses include hotels, resorts, commercial activities and itinerant condominiums. The maximum building height is 55 feet. The six-block Urban Resort zone (between 5th Street S and 11th Street S) is the area currently planned to accommodate the most significant amount of future tourism-oriented accommodations and related commercial development in the city.

The boundaries of these designations are affected by the various seashore conservation lines. The Seashore Conservation Lines (SCLs) are survey lines that delineated the actual shoreline as determined by the state of Washington at particular points in time. The shoreline accretion activity over the past 100 years (and especially within the past fifty years) resulted in movement of the seashore conservation line steadily westward. There are several historic conservations lines now documented, including the original 1889 Government Meander (GML) Line, which is also referred to as the Western Upland Boundary (WUB) and is the eastern boundary of the areas subject to the SMP. More recently, the 1968 SCL, the 1980 SCL and the 1990 SCL were established. The 1980 SCL is the building setback line for most areas, although some areas such as the Urban Resort zone are limited to the 1968 SCL.

The Dune Management Report (March 2000) predicted development impacts from buildout of the shoreline under the current adopted SMP. The results of this analysis are shown in Figure E-13.

Figure E-13: City of Long Beach, Shoreline Jurisdiction Buildout Analysis

SHORELINE DESIGNATION	TOTAL ACRES	MAX. LOTS	BUILT ENVNT % COVERAGE	BUILT ENVNT ACRES	UN- BUILT ACRES	WETLAND ACRES	BUFFER ACRES
Single family (S1) + Multifamily (S2) Residential	144	626	60%	86.4	57.6	18.7	18
Shoreline Rural & Urban Resort	95	413	75%	71.3	81.4	16	17
Shoreline Conservancy	226	NA	NA	NA	226	34.4	NA
TOTALS	465	1,039		157.7	365	69.1	35

Note: Maximum number of lots in the Residential and Urban Resort zone based on average 10,000 s.f. lot size.

Source: Dune Management Report, March 2000

The report indicated that at maximum build-out, and based on current trends of increasing multi-family and condominium development and current adopted development regulations, approximately 1,039 lots with built structures (including buildings, driveways, parking, etc.) covering 158 acres could be built. An additional 20 acres of new roads would be constructed, for a total of 178 acres of built land.

4.6 Groundwater Level³

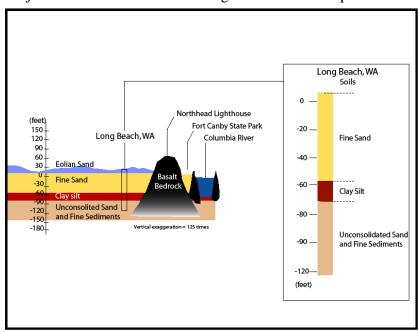
The groundwater system of Long Beach consists of a sand aquifer with some lenses of silt and clay that may act as confining beds in local areas (USGS, 1995). Average annual groundwater recharge by infiltration and percolation of precipitation is estimated at 58 inches. Groundwater generally moves perpendicular to the spine of the Peninsula along the north-south line. Groundwater flows east or west from this line. Levels may fluctuate seasonally due to variation in recharge and discharge. The median depth to water from the surface of the land is 1.5 feet and median maximum depth is 8.7 feet.

_

³ Stormwater Management Plan (1998) Gray and Osborne Inc. (page 2-6)

4.7 Soil and Geology^{4 5}

The Willapa Barrier consists of well sorted fine-grained sand, and averages 23 miles long by 2 miles wide by 50-75 feet deep. The Holocene sand rests on a thin platform of clayey silt (9-15 feet deep). The bed rock is more than 1500 feet deep in most places, though it is closer to the surface near Cape Disappointment State Park. Adjacent to the beach area is a region of dunes composed of an active shoreline dune,



a stabilized inshore dune. and interdune area separating the two. The interdune region is relatively wide and level, and maintains a water table at or near the surface during the rainy season. The stabilized inshore dune forms a ridge of higher elevation, up to 25 feet in the Long Beach area, and may have slopes up to 10%.

Source: Journal of Sedimentary Research, Vol. 69, No. 6, November 1999

Soils in the active shoreline dune area are generally loose and excessively drained. The area defined by the interdune and the stabilized inshore dune areas and eastward as far as SR 103 has the Westport fine sand variety soils. This soil has moderate 3-10% slopes. It runs a slight risk of erosion by runoff but a higher risk of erosion due to wind..

East of Ocean Beach Boulevard and beyond the city's eastern limits are deposits of Netarts fine sand interspersed with Yaquina loamy fine sand. The deep, well-drained Netarts sand is typically found on the higher elevations and slopes of greater than 3%. On the other hand, the somewhat poorly drained Yaquina soils lie typically in the interstitial depressions. These soils remain saturated for most of the year. The water table through the winter months is generally at 0-2 feet east of Pacific Avenue and in dune lands, which are both non-hydric.

_

⁴ Stormwater Management Plan (1998) Gray and Osborne Inc. (pgs 2-4 to 2-5)

⁵ Soil Survey of Grays Harbor County and Pacific County of Washington (1979) USDA Soil Conservation Survey.

There are concentrations of other hydric soils such as Seastrand Mucky Peat Sand and Seastrand Variant Muck. A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. When soils thus become saturated with water due to rainfall and flooding, gas diffusion in soil slows (some 10,000 times slower) because there are no open passageways for air to travel. When oxygen levels become limited, intense competition arises between soil life forms for the remaining oxygen. When this anaerobic environment continues for long periods during the growing season, the biological and chemical reactions that begin to dominate differ from those in aerobic soils. In soils where saturation with water is prolonged and is repeated for many years, unique soil properties usually develop that can be recognized in the field. Such hydric soils may occupy a relatively small portion of the landscape, but they maintain important functions in the environment.⁶

The engineering properties of the above soil types are listed in the Soil Survey by the US Department of Agriculture and should be referenced for any structural or permeability considerations for building codes or street standards.

4.8 Noise Pollution

Noise pollution in Long Beach is not a frequent issue. Noise pollution, when it is reported in Long Beach, is generally related to commercial establishments that stay open late, seasonal rentals of single family homes or condominiums, or special events and festivals. Overall, unlike many other tourist destinations, Long Beach has not experienced systemic noise pollution and as such does not have any methods to record noise levels.

4.9 Light Pollution

Studies have shown that inappropriate outdoor light fixtures on private property as well as the public right-of-way are not only a waste of energy but also negatively impacts the natural environment, and some contend, human health. Long Beach does not have a night-sky ordinance. The pronounced instance of light pollution as evident on the beach is caused by several large adjacent developments. There is also light spillover in the Old Town area along Pacific Avenue. The rest of the town is fairly dark after sunset.

4.10 Summary of Issues

Long Beach is surrounded by fairly native and undisturbed ecology. However, as it continues to grow, the City will need to keep an eye on currently minor development impacts that may be amplified with increasing amount of development and human activities. Like many other communities located in such scenic settings, Long

⁶ This definition (Federal Register, July 13, 1994) replaced the older 1991 version and accomplished two things. First, a soil that is artificially drained or protected (ditches, levees, etc.) is a hydric soil if the soil in its undisturbed state meets the definition of a hydric soil. Estimated soil properties for manipulated soils are based on best professional estimates of the properties thought to exist before manipulation. Second, the link between the definition and criteria was removed. Source: en.wikipedia.org

Beach's economy is closely related to the health of its natural landscape. Therefore, the importance of balancing development needs with environmental limitations will be additionally critical to the city. Dune landscapes are integrated over miles and shift with the wind and storm surges. Therefore, development approaches to the city must be cognizant of leaving long stretches of undisturbed dune ecology rather than only protecting small pockets. Current concerns regarding global climate change and related phenomenon of rising sea levels and more powerful storm surges could affect Long Beach, as could the potential erosion of beach sand, should efforts to stop it fail.

5. PARKS, OPEN SPACE AND RECREATION

A Parks, Open Space and Recreation Plan (POSR) is a strategic way for a community to envision an outstanding future for its natural and recreational resources. In a setting as environmentally rich as Long Beach, it is an opportunity to recognize the natural setting and ecological dynamics that set the city apart from others. These environmental qualities, enriched by quality recreational programming, parks and facilities that serve the community, and public policies that support community goals are the backbone of the Plan.

In Washington State, the legislature in 2002 added a mandatory Parks and Recreation Element to the existing Growth Management Act. As with the initial GMA goals, the intention is to maintain or improve the area's quality of life as the community grows. The GMA goals state that Washington communities should:

- Retain open space;
- Enhance recreational opportunities;
- Conserve fish and wildlife habitat:
- Increase access to natural resource lands and water; and
- Develop parks and recreational facilities.

The Long Beach POSR Plan is being developed along with the Long Beach Comprehensive Plan and as such is intended to be consistent with the Capital Facilities and Land Use Elements, as well as the Critical Areas Ordinance and other ordinance changes that will be developed. The recommendations contained in this plan reflect the analysis of the growth trends and service needs of the City of Long Beach.

As the first formal POSR Plan for the City of Long Beach, this is a greenprint to embark upon a course of action that will connect existing and future parks and habitat in a way that help define the city as an ecologically sound community. A city that provides its citizens and visitors with an exemplary recreational experience is a rare Pacific coastal environment.

5.1 Community Context

When considering the development of a Long Beach Parks and Recreation system, there is the need to consider a broader set of conditions that establish its context. This section will summarize key conditions and look at some implications and responses to those conditions.

5.1.a. LOCATION

The City of Long Beach's physical geography is part of one of the Pacific Northwest's most dynamic shorelines. Formed over eons from the outfall of the mighty Columbia River, the Long Beach Peninsula reaches northward from the rock formations and jetties of Cape Disappointment over 28 miles to the horn of Leadbetter Point. This

long and narrow peninsula connects at its southern base to the mainland, creating the inner southern arc of the Willapa Bay.

The dynamic nature of the peninsula is starkly highlighted by the accretion of a half mile of westward land at Long Beach, which has created a new shore dunes and emergent wetland habitat over the last 40 years. The layers of historical dunes running north-south has also formed complementary wetlands in their interstitial areas.

Long Beach is part of the extreme southwest corner of the State of Washington in Pacific County. It is a sparsely populated area off of the more populated I-5 corridor 112 miles west-northwest of Portland OR, and 171 miles south-southwest of Seattle, WA.

5.1.b. PLANNING IMPLICATIONS:

Long Beach has always been a destination point, from the original Shoalwater indigenous population, through Lewis and Clark's Corps of Discovery expedition, to its evolution as a resort community. Being outside of the I-5 economic belt, the local economy has been driven by seasonal tourism fluctuations, with the cranberry agricultural and fishing industries adding to the local economy. It is a community that attracts visitors due to its edge relationship to the Pacific Ocean and the Columbia River.

As a low-lying land form with a causal relationship to the outfall of the Columbia River, it is vulnerable to coastal change, extreme weather and sea level change. Habitat conservation zones are vulnerable to these changes, as could be the developments associated with the City, including its parks and recreation elements.

5.2 Historic Perspective

Long Beach has a rich story from the first peoples now known as Shoalwater, through the oceanic "Northwest Passage" explorations of the late 1700s, to the terrestrial explorations of Lewis and Clark in 1805. The City of Long Beach evolved from a series of resort developments started as early as the 1850's.

The development of the Peninsula over time brought a railroad, and wetland development into a significant cranberry agriculture. The City has developed as the largest local incorporated area and has become the primary commercial resort area of the region.

5.2.a. PLANNING IMPLICATIONS

With an important national and regional story to tell, Long Beach has embraced the "Discovery" period. There are many more potential elements that could be added. The City could develop an inventory and master plan in collaboration with existing organizations. The conservation, and restoration of existing building and locations of

historic significance such as the railroad line could offer both contemporary and vintage amenities.

5.3 Physical Development Pattern

The series of dunes formed from the northern mouth of the Columbia River has shaped a striated terrain of north-south remnant dunes with emergent wetlands between. Pacific Avenue took the primary dune highpoint to establish a main road. The city block system has stretched along this axis, filling in the available and filled land first to the east, and then to the west with the shore accretion. These natural boundaries have created an elongated city with two strong cross roads created by wetland crossings at the Sid Snyder Drive, and Pioneer Roads.

5.3.a. PLANNING IMPLICATIONS

There is a pattern of resort development west of Pacific Avenue, and year-round and seasonal residency east of Pacific. These have both been relatively low-density, but recent economic activity in the resort areas suggests increased tourist use densities. Movement by car is becoming congested in tourist season along Pacific Avenue with residents often choosing to use the other north-south streets for in-city movement.

There is an opportunity to activate the eastern side of town for interpretive recreational uses by connecting into the eastern wetland complex, and locating neighborhood parks in the northeast and southeast city corners. The existing Parks facilities are congregated in the center of the city.

5.4 Existing Parks and Recreation Resources

This chapter identifies and discusses the inventory of existing parks and recreation resources in the City of Long Beach. The City of Long Beach currently owns 7 park properties ranging in size from little more than one-twentieth of an acre to more than 60 acres. The City has also created and maintains the **8.2** mile Discovery Trail. The City portfolio consists of **125.89** acres of parkland. (See Figure E-14, page E-41, for a summary of city POSR resources.)

For future planning purposes, this chapter will categorize the existing parks and recreation resources into four general categories: **Neighborhood Parks** including mini-parks, **Special Use Parks, Open Space and Conservancy Lands**, and **Linear Trails**. Although a resource may have features from more than one category, most facilities fall into one general category based on size and service area, primary uses, or public access. These categories will allow the City to identify quality of service to its citizens based on a geographical basis. The categories are based upon the National Recreation and Parks Association system, which is a sound basis for determining needs and future park resource distribution.

Long Beach has acquired parkland in a variety of ways. Like most cities with a long history and having been incorporated in 1922, parks have come from outright

purchases, donations, and land transfers. The development of the parks has also come from a variety of sources, but primarily from the citizens, social organizations and the city, all acting in cooperation. The Open Space (Conservancy) properties transferred from Washington State Parks have had limited development and are used primarily for passive recreation, but do include the Boardwalk and the Discovery Trail.

5.4.a. NEIGHBORHOOD PARKS

Neighborhood parks are the anchor of a park system and serve as the recreational and social focus of the neighborhood. They should be developed for both active and passive recreation activities geared specifically for those living within a reasonable access radius by walking or biking. A typical distance is 1/2 to 1/4 mile radius. Whether to provide restrooms or other facilities is determined based on each park's primary uses and local needs. Accommodating a wide variety of age and user groups, including children, adults, the elderly and special needs populations, is important. Neighborhood parks usually have a combination of playground and park designed for nonorganized recreation activities such as play structures, picnic areas, open space play areas, outdoor sport courts, multi-purpose sport fields, and local trail and habitat elements. The ideal size depends on the particular characteristics of the site and local needs and users. A typical park may be from 1 to 10 acres or more.

Some parks identified in this category are much smaller than the desirable size for a neighborhood park and usually respond to a particular need or opportunity. These **mini-parks** can be part of a retail or residential area, fit into a small site that satisfies a narrow set of needs such as a small lot with play equipment, a historic location, or a small habitat interpretive opportunity, for example.

Long Beach has **14.32** acres of neighborhood parks. Culbertson Park (12.6 acres) and Stanley Park (1.26 acres) would fit into the neighborhood park category as multi-purpose sites with the larger scale and the variety of uses they have been developed to support. The two remaining mini-parks are the 3rd and 5th St. South and Pacific Avenue corner parks (.46 acres). Created as part of an urban improvement and economic development effort, the small corner parks serve as civic gathering locations for both tourists and residents. They celebrate local history, and art. and provide police services and public restrooms.

5.4.b. SPECIAL USE PARKS

Special use facilities are single-purpose recreational and civic elements like nature centers, golf courses, zoos, conservatories, historic buildings, outdoor theaters, skate parks, swimming pools and interpretive centers. Special use facilities may include areas the

preserve, maintain and interpret buildings, sites and other objects of historical or cultural significance.

Coulter Park (.03 acre) is a civic amenity that provides a location for public meetings in a relocated historic railroad depot building and a small green. It is newly constituted and its uses are just beginning to emerge. Long Beach has **0.03** acres of special use parks.

5.4.c. OPEN SPACE AND CONSERVANCY LANDS

These unique parks are natural resource lands set aside for preservation of significant natural resources, remnant landscapes, open space areas for visual aesthetics and natural buffering. These parklands are typically characterized by significant natural vegetation and landforms, wildlife habitat, drainage ways, wetlands and surface water management areas.

Resource and open space lands are areas of natural quality for passive use or nature-oriented outdoor recreation, education and interpretation. Recreational uses are often secondary to resource conservation but can include interpretive trails, viewpoints, bridges, and picnic areas. Educational uses can also include site sensitive design of interpretive buildings and public amenities including restrooms.

Because of its unique beach accretion, its relationship to the Long Beach Peninsula shoreline and its place as a regional recreation location, the city has accepted title transfer from the Washington State Parks of two significant conservancy properties. The Open Space and conservancy Lands contain 111. 54 acres. The South Conservancy Area (51.48 acres) and the North Conservancy Area (60.06 acres) are lands with significant emergent wetlands and native and non-native vegetation, in a strategic public location reaching to the 2000 Seashore Conservation Line.

In addition, on the City's west side there are 8 similar but narrow parcels still in State Park ownership that act as de facto conservancy parcels. To the east, the City boundary is formed by a major interdunal wetland complex that is designated as a critical area wetland and as agricultural areas in Pacific County. The ground reality is that these resource lands serve as an additional open space edge or boundary to the City of Long Beach and have as yet not been activated for their interpretive habitat and recreational potential.

Long Beach has existing Open Space and Conservancy Lands of 111.54 acres.

5.4.d. LINEAR TRAILS

Linear trails are often based on natural corridors, such as abandoned railroad lines, active utility rights-of-way, and natural drainage patterns. Long Beach has the two prominent north-south physical features – the shoreline and the inter-dunal wetlands, which could be linked by east-west trails keyed to pedestrian-friendly streets and other park, commercial and civic amenities.

The City of Long Beach has partnered with Washington State Parks, Pacific County, and the City of Ilwaco to develop the first phase of the long-desired Discovery Trail, celebrating the explorations of Lewis and Clark and the natural splendor of the Long Beach Peninsula. The 8.2-mile trail extends from 26th Street N. in Long Beach southward through the dunes, through Seaview to Cape Disappointment State Park, and ends at Main Street in Ilwaco. Ultimately, the trail is planned to extend upriver along the Columbia River to Knappton Cove, for a total distance of about 30 miles.

Parallel to a portion of the Discovery Trail is an elevated boardwalk that stretches for 0.4 miles. Adding this to the existing Discovery Trail of 8.2 miles, there is **8.6 miles** of linear trail in or maintained by the City of Long Beach.

Figure E-14: Summary of Parks, Open Space and Recreation Resources

NEIGHBORHOOD PARKS	AREA	DESCRIPTION/CURRENT USE
Culbertson Park	548,800 SQ. FT. OR 12.6 ACRE	children's play area, softball field (1), baseball fields (2 – leased 30,000 sq. ft.), tennis court (1), basketball court, concession stand, skateboard area, public bathrooms
Stanley Park	55, 000 SQ. FT. OR 1.26 ACRE	Softball field (1), batting cage, concession stand, public bathroom
5 th St. S. Mini Parks	11,700 SQ. FT. OR .27 ACRE	Four corner lots along Pacific Ave. S. providing an urban square; a fountain, sculptures and art installations, public bathrooms
3 rd St. S. Mini Parks	8,100 SQ. FT. OR .19 ACRE	Three corner lots along Pacific Ave. S. (the fourth is the Long Beach Police Dept.); Lewis and Clark interpretive exhibit, gazebo, sculptures, public bathrooms
SPECIAL USE PARKS	AREA	DESCRIPTION/CURRENT USE
Coulter Park	1,500 SQ. FT. OR .03 ACRES	Relocated historic train depot used as a public meeting area. A small green with picnic tables and flagpole
OPEN SPACE AND CONSERVANCY LANDS	AREA	DESCRIPTION/CURRENT USE
South Conservancy Area	2,242,302 SQ. FT. OR 51.48 ACRES	Former Washington State Parks land from 4 th St. S. to 4 th St. N. west of the Old Town West District to the 2000 SCL; dune accretion area with dune grass/shore pine habitat and a mosaic of social trails and seasonal wetlands; public restrooms at both beach approaches
North Conservancy Area	2,616,322 SQ. FT. OR 60.06 ACRES	Former Washington State Park land from 8 th St. N. to 14 th St. N. west of restricted single family zoning to the 2000 SCL; dune accretion area with dune grass/shore pine habitat and a mosaic of social trails and seasonal wetlands
"Piano Key" Conservancy Parcels	NOT YET CONVEYED	8 narrow parcels of WSP land that lie in the dune accretion area
LINEAR TRAILS AND INTERPRETIVE SITES	AREA	DESCRIPTION/CURRENT USE
Discovery Trail (formerly the Dune Trail)	8.2 MI. (2.5 MI. IN CITY OF LONG BEACH)	A meandering 10'- wide asphalt surface coastal dune trail from 26 th St. N. near the north City boundary heading south; extends southward through Seaview to Beards Hollow and ends in Ilwaco. Two segments totaling 2.76 miles (30 th St. in Seaview to Beards Hollow and Beards Hollow to Ilwaco) are constructed but not paved (2007). Includes a bronze heritage Lewis and Clark "tree" interpretive site and other natural and historical interpretive materials
Long Beach Boardwalk	2,200 FT. OR .4 MI.	A 10'-wide elevated wood boardwalk in the active dune area. A series of interpretive signage and a whale bones exhibit

5.5 Community Needs and Visioning

A series of broad public vision planning workshops were held to integrate the Parks, Open Space and Recreation (POSR) plan with the other elements of the Comprehensive Plan. These are summarized in Appendix C.

POSR Survey: In addition to the above community meetings, the community was surveyed at a public meeting, and subsequently the survey was distributed to a broader range of citizens including school aged citizens. A total of 181 surveys were completed and tallied with results.

The results showed a strong desire to connect the community's natural and parks resources by a safe trail/pedestrian system. Access to water, both natural and in a public facility, was also noted. This was often linked with an interest in a multipurpose Community Center and increased recreational and cultural programming.

The following are topics were presented and discussed at the February 6, 2007 public meeting.

<u>Level of Service Standards</u> (LOS) – are a required component of meeting the Washington Growth Management Act standards. Long Beach is in the envious situation of having a large amount of existing park and open space within the City. There are 14.32 Acres of Neighborhood Parks in Long Beach; with a population of just over 1,400, this results in a ratio of about 1 Acre per 100 residents. Similarly the Habitat Conservation Parks provide 111.54 Acres of open space, far beyond a common LOS standard of 1 acre per 100 persons.

A normal LOS standard for Neighborhood Parks for a lower-density city is to have a park within 1/2 mile of all residents. Many communities also want a park within every arterial quadrant, to create a safe pedestrian path for children and elders and allow them to access parks without causing them to cross a busy street. The plan looks at the north and south ends of the Long Beach as "underserved" according to these criteria. (See Appendix A, Map A-4, Parks and Open Space Plan, for a graphic analysis of the underserved area.)

The following questions were discussed:

- Do you agree that Long Beach should have a Neighborhood Park within 1/2 mile of all citizens as a goal?
- Should there be parks on each side of Pacific Highway according to the 1/2 mile criteria?
- Should your POSR Plan identify specific sites, or would it be better to use the opportunity site strategy?
- Do you have idea's about a park site within these areas?
- Should these new parks focus on very young children and elders?

"Need Based" New Parks/Opportunity Sites — the Level of Service standard discussed above for Neighborhood Parks can be shown in a visual analysis for the north and south ends of the City. One of the POSR strategies might prioritize placing parks in these areas and for the "draft recommendations" existing vacant parcels have been identified in the underserved areas.

These are hypothetical new park sites and it is common practice in a Parks Acquisition strategy to not identify specific sites, but to rather look for "opportunity sites" within the need area.

5.6 View Protection In Long Beach

The Long Beach community wants to conserve the unique visual quality of their historic coastal location. Through the public planning process the clear intention was that there are specific conditions that require protection:

- Natural views towards the ocean habitat. This includes the grand vistas at the two main historic access points (Sid Snyder Dr. and Bolstad Avenue), and some of the public street ends that lead to the shoreline dunes, wetlands and beach;
- Natural views toward the eastern wetland complex at public street ends and from roadways that transect the wetlands;
- Views from the public right-of-way of identified historic structures and interpretive elements meant for visual display, such as the relocated historic depot; and
- Unique community "treasures" that represent community character, such as the sculptures of aquatic life in the 3rd Street S and 5th Street S parks, or the giant frying pan at 5th Street S.

View Protection Policies are usually created to conserve unobstructed views of natural features or historical civic "amenities" from public land such as public rights-of-way (ROW). Attempts to conserve views from private land have been attempted but there is "legal uncertainty" that such a policy can be based solely on "aesthetic considerations". It seems to be necessary to also have health, safety or welfare issues present to limit building heights, vegetation or utility line placement with the intention of preserving a view from private property.

At the February 6, 2007 public meeting focusing on the Parks Plan, a series of questions were asked as a means of beginning to identify the specific locations and characteristics that lead to our four priority areas listed above. The following questions were the basis of our discussion:

- What views to the sea should be protected? Does the height of the active dune obscure the view, or is it part of the view sequence?
- What historical buildings deserve to have the public view conserved?
- Are there other natural or unique "elements" that should be considered?

5.7 Cultural Heritage Planning for Long Beach

Long Beach has a long story and ardent local historical interest in its diverse past and its dynamic future. It is a community that values and promotes its cultural and historic assets.

Cultural Heritage Planning is a relatively new policy element in comprehensive planning. It is commonly used to define a variety of community aspects that are valued highly and deserve protection or emphasis. It can be used to create a programmatic way to conserve these resources, inform the public about them, or link them via a physical path or virtually. Cultural resources can provide a focal point for a park or neighborhood, and can be an important basis of a market plan for increasing tourist revenue.

In Long Beach there are some clear subjects to be considered such as: the Long Beach peninsula natural history, first peoples history and culture, the age of Northwest Coast exploration, the Peninsula railroad, cranberries, city history, kites, beach driving, and razor clams. There may be more topics historically; there will be more in the future.

Another set of questions were presented to the public at the February 6, 2007 Parks Planning meeting:

- What should be included in the Cultural Heritage Plan?
- What should be accomplished with the plan? (within budget)
- What role will community volunteers play? Who are the natural stewards of the Cultural Heritage Plan?

The response was limited in specific suggestions but it was noted that there is a Long Beach Peninsula tourism web-site that has established itself as a resource to identify and protect the existing cultural heritage. The Long Beach comprehensive plan and future policy should work very closely with this resource.

5.8 Summary

It is clear that developing parks and enhancing natural areas for recreational and educational purposes is an important priority for Long Beach residents. The beach offers an expansive area for recreational purposes, but wind, ocean conditions and the wet winter months limit the use of the beach, as well as the activities that can be hosted there. Therefore, the city needs to view park planning for neighborhood purposes in addition to protecting the beach and shoreline areas. The city also needs to identify opportunities for creative park design and planning that can leverage its tourism-focused economy, particularly in the downtown and resort areas. Residents also want to link parks and other destinations through enhanced trail and green street connections.

6. MARKET OVERVIEW

This analysis explores the present and future markets for development and redevelopment in the Long Beach area. This process includes:

- A review of the population and demographics of the area;
- An estimate of the number of households and their incomes to determine the purchasing power of the area;
- An overview of the housing market; and
- An overview of the employment outlook to determine the demand of office space in the area.

6.1 Growth in the Region

There are two components of population change in any area: the natural change and the migratory change. The natural change is generally driven by the number of births and deaths. The migratory change is driven by economic and amenity factors that cause people to move into and out of an area. The economic factors include the presence or absence of well-paying employment, while the amenity factors are the "other" issues that make people want to live in an area. Long Beach's population is relatively stable and increasing, but not rapidly, rising from 1,283 in 2000 to an estimated 1,455 in 2006. This growth rate has been comparable to growth in Pacific County, though not as rapid as Washington State as a whole, as shown in Figure E-15.

Figure E-15: Population Growth, 2000 to 2006

CENSUS	2000	2001	2002	2003	2004	2005	2006
Pacific County	20,984	21,000	21,000	20,900	21,000	21,300	21,500
Unincorporated	13,969	13,885	13,940	13,880	13,955	14,200	14,255
Incorporated	7,015	7,115	7,060	7,020	7,045	7,100	7,245
Ilwaco	950	950	945	940	955	975	1,015
Long Beach	1,283	1,385	1,340	1,345	1,360	1,395	1,455
Raymond	2,975	2,975	2,985	2,960	2,970	2,975	3,005
South Bend	1,807	1,805	1,790	1,775	1,760	1,755	1,770
Washington State	5,894,143	5,974,910	6,041,710	6,098,300	6,167,800	6,256,400	6,375,600
Unincorporated	2,374,593	2,407,904	2,423,073	2,361,802	2,395,226	2,438,882	2,473,714
Incorporated	3,519,550	3,567,006	3,618,637	3,736,498	3,772,574	3,817,518	3,901,886

Source: State of Washington Office of Financial Management.

According to Office of Financial Management (OFM) estimates, 23.5 percent of Pacific County's residents are 65 or older, a greater proportion than any other county in the State of Washington. As a result, any population increase is primarily caused by people moving into the area, as opposed to younger population that will experience a natural increase in population due to births to current residents.

The population of Long Beach has been stable for the last 25 years. Population was reported in the 1980 census as 1,243; in the 1990 census as 1,236; in year 2000 as 1,283; and estimated in 2006 at 1,455, as shown above. While the population in Long Beach has been growing slowly, the rest of the Peninsula has been capturing a greater share of new residents. As a result, there has been some population increase on the peninsula. The population of the Peninsula Census County Division in Pacific County was 8,827 in year 2000, a 23-percent increase or 1,649 additional people over the 1990 population of 7,178.

6.2 Income

Income data show that the household incomes in the City of Long Beach are not as high as those in the county or the state as a whole.

The median household income in the City of Long Beach in 1999 (from the 2000 census) was \$23,611, which would inflate to \$27,678 in 2005 dollars. This compares to \$31,209 from the census for Pacific County, which inflates to \$36,585. Part of the explanation for this differential is a smaller proportion of typically higher paying jobs in the professional/technical and manufacturing sectors in Long Beach, and a greater number of low-paying service jobs. The industry group responsible for the largest amount of employment in Pacific County is Government, as shown in Figure E-16 below.

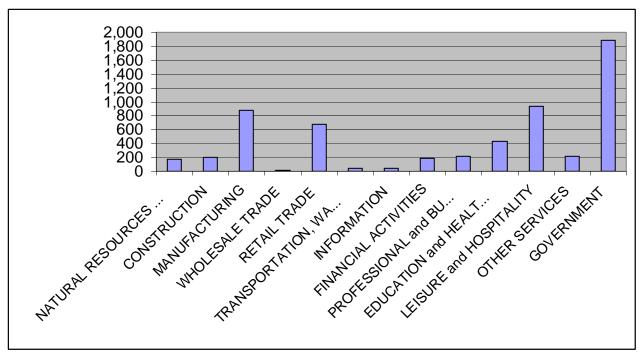


Figure E-16: Employment by Industry, Pacific County, 2004

Source: State of Washington Employment Security Department.

6.3 Office Market

The market for professional office space is driven by employment requiring office space. Growth in employment leads to a need for additional office space. According to employment forecasts developed by the Washington State Office of the Forecast Council and Forecasting Division of the Office of Financial Management, employment in Washington State is expected to grow about 1.9 percent annually between year 2004 and 2009, slowing slightly to 1.2 percent annually between years 2009 and 2014. Pacific County's employment is also expected to grow, albeit at a somewhat slower pace, an increase of 1.2 percent annually between 2004 and 2009 and an increase of approximately 1.0 percent annually from years 2009 and 2014, as shown in Figure E-17.

Figure E-17: Employment Projections, Pacific County, 2004-2014

INDUSTRY GROUP	EST. EMP. 2004	EST. EMP. 2009	EST. EMP. 2014	AVG. ANNUAL GROWTH RATE 2004- 2009	AVG. ANNUAL GROWTH RATE 2009- 2014
TOTAL NONFARM	5,910	6,280	6,590	1.2%	1.0%
NATURAL RESOURCES and MINING	170	150	140	-2.5%	-1.4%
CONSTRUCTION	200	230	240	2.8%	0.9%
MANUFACTURING	880	870	880	-0.2%	0.2%
WHOLESALE TRADE	20	30	30	8.4%	0.0%
RETAIL TRADE	670	710	730	1.2%	0.6%
TRANSPORTATION, WAREHOUSING AND UTILITIES	50	60	60	3.7%	0.0%
INFORMATION	50	50	50	0.0%	0.0%
FINANCIAL ACTIVITIES	190	200	210	1.0%	1.0%
PROFESSIONAL and BUSINESS SERVICES	210	220	260	0.9%	3.4%
EDUCATION and HEALTH SERVICES	430	480	510	2.2%	1.2%
LEISURE and HOSPITALITY	940	1,020	1,080	1.6%	1.1%
OTHER SERVICES	220	250	260	2.6%	0.8%
GOVERNMENT	1,880	2,010	2,140	1.3%	1.3%

Source: State of Washington Employment Security Department.

This growth would yield a total increase of approximately 11.5 percent by year 2014. These increases would vary over industry groups, with natural resources and mining actually expected to lose jobs over the forecast period, as shown above. To allocate Long Beach's share of jobs, the Washington State Employment Security Department recommends applying the allocation of jobs from the 2000 census, in which Long

Beach represented 6.58 percent of all jobs in Pacific County. Applying this allocation yields the following employment forecast for Long Beach, as shown in Figure E-18.

Figure E-18: Long Beach Estimated Employment
USING THE CENSUS-SHARE ALLOCATION SUGGESTED BY THE WASHINGTON STATE ESD

	EST. EMP. 2004	EST. EMP. 2009	EST. EMP. 2014	AVG. ANNUAL GROWTH RATE 2004- 2009	AVG. ANNUAL GROWTH RATE 2009- 2014
TOTAL NONFARM	389	413	434	1.2%	1.0%
NATURAL RESOURCES and MINING	11	10	9	-1.9%	-2.1%
CONSTRUCTION	13	15	16	2.9%	1.3%
MANUFACTURING	58	57	58	-0.3%	0.3%
WHOLESALE TRADE	1	2	2	14.9%	0.0%
RETAIL TRADE	44	47	48	1.3%	0.4%
TRANSPORTATION, WAREHOUSING AND UTILITIES	3	4	4	5.9%	0.0%
INFORMATION	3	3	3	0.0%	0.0%
FINANCIAL ACTIVITIES	13	13	14	0.0%	1.5%
PROFESSIONAL and BUSINESS SERVICES	14	14	17	0.0%	4.0%
EDUCATION and HEALTH SERVICES	28	32	34	2.7%	1.2%
LEISURE and HOSPITALITY	62	67	71	1.6%	1.2%
OTHER SERVICES	14	16	17	2.7%	1.2%
GOVERNMENT	124	132	141	1.3%	1.3%

Source: State of Washington Employment Security Department.

From the City's land inventory, there is approximately 10 acres of land currently devoted to professional office space. Assuming an average floor-area coverage of 0.20 to 0.25, this translates to approximately 80,000 to 120,000 square feet of professional office space in the City. Applying the growth in employment projected to year 2014 and assuming the space per employee stays relatively constant, this projection translates to an increase in demand for office space in Long Beach of between 10,000 and 15,000 square feet of office space by year 2014, as quantified in Figure E-19.

Figure E-19: Office Market Overview, City of Long Beach

Estimated acres of land dedicated to professional office	10.4
Average existing floor-area ratio	.225
Estimated amount of existing professional office space	80,000-120,000
Square footage requirements per employee (suburban	
environments)	250-350
Estimated number of employees requiring professional office	
space	250-400
Forecast increase in professional services and real estate	11.5%
Additional square footage of office space required	10,000-15,000

6.4 Retail Market

The retail market in Long Beach requires a two-pronged approach to effectively capture the convenience market for residents while still appealing to the destination shoppers of the visitor market. While the City's retailers have managed to capture strong visitor spending of those who visit the area, a challenge for retailers in Long Beach is the propensity of local shoppers to seek better prices and selection elsewhere. The trade areas for most convenience goods are defined by consumer distance and convenience factors. As households have been getting smaller and the age of householders older, consumers are likely to prefer more convenient locations and utilize more services nearby. There is some potential for retailers who can take advantage of convenience-seeking shoppers and appeal to local loyalties in Long Beach. The kinds of markets that can be expected to capture market share in this way include convenience goods, personal services, household equipment and restaurant facilities.

On average, households spend about one-third of their income on housing. Other categories of expenditures can be estimated using the Consumer Expenditure Survey. Other large categories of expenditures include transportation (about 13 to 16 percent of a household's income), food (11 to 12 percent), and insurance and pensions (9 to 10 percent). A summary of the average percent of a household's income spent on different categories is shown in Figure E-20.

Figure E-20: Average Household Expenditures, As a Percentage of Total Household Income

BASED ON THE WESTERN US AND PORTLAND, OR CONSUMER HOUSEHOLDS

Average annual expenditures	
Food	11-12%
Food at home	6-7%
Food away from home	5%
Alcoholic beverages	1%
Housing	28-29%
Utilities, fuels, and public services	5-17%
Household operations	2%
Housekeeping supplies	1%
Household furnishings and equipment	3-4%
Apparel and services	3-4%
Transportation	13-16%
Heath care	5%
Entertainment	5%
Personal care products and services	1%
Reading	<1%
Education	2%
Tobacco products	<1%
Misc.	1%
Cash contributions	3%
Personal insurance and pensions	9-10%
G G E II G	

Source: Consumer Expenditure Survey.

Based on these spending patterns, businesses in Long Beach may find the opportunity to meet some of the retail spending needs of local consumers. One challenge for a community like Long Beach is the cyclical nature of its residents. As noted earlier, 495 of the estimated 1,169 housing units in Long Beach are classified as vacant. With over one-third of the housing units only seasonally occupied, these households and their spending do not support the retail services in the area year-round. Though population has been relatively stable in Long Beach, the peninsula has been experiencing some growth. As the trade areas for most retail and services includes much of the peninsula, this population growth coincides with additional market demand for those consumers.

The number of businesses located in Long Beach has been steadily rising, from 208 businesses licensed in 2002 to 317 businesses licensed in 2007.

6.5 Resort Market

Overnight lodging facilities have also struggled with the seasonal nature of the population. While a strong visitor population would suggest a robust market for hotel/motels, the real estate market generally favors residential development over itinerant lodging. This trend led to a 2007 zoning text amendment to prohibit long-term residential uses in resort zones. Nationwide, hotels/motels have enjoyed increases in revenues and profits, but have also experienced rising expenses. The largest marginal expense related to operating a hotel is labor, which is directly related to the prevailing wages for the area. Limited-service hotels have been faring better than full-service hotels, in part because some of the provided amenities and services may not be valued by the patrons.

6.6 Summary of Issues

Long Beach's economy could be bolstered by limiting the amount of leakage that occurs to nearby destinations for consumable and household goods. However, land use and zoning does not support the current trend in the market that leans towards bigger box developments. Primarily a tourism-based economy and interested in remaining so, Long Beach will need to work with local residents and businesses to not only develop family-friendly and affordable lodging options, but think creatively in terms of more bed and breakfasts, in-home stay options, youth hostels and so on. It is unlikely that Long Beach will play any major role in more light industrial development without negatively impacting its residential flavor. Rather, the city might want to work with the County and Ilwaco to develop a Peninsula-wide strategy for industrial development.

7. TRANSPORTATION

This Section documents and analyzes the existing conditions of the Long Beach transportation system. The Existing Conditions Analysis has six sections: (1) Street System, (2) Traffic Volumes, (3) Traffic Operations, (4) Public Transportation, (5) Non-Motorized Transportation, and (6) Aviation.

7.1 Street Network

7.1.a. STREET NETWORK DESCRIPTION

The Long Beach street network is primarily a grid of north-south and east-west streets; however, like the city's corporate limits, the city street grid is long and narrow on a north-south axis parallel to the shoreline. (The City of Long Beach and Long Beach Peninsula road networks are shown in Figure E-21:.) The only through-street that traverses the entire length of the city is State Route (SR) 103 (Pacific Avenue), which serves not only as the city street network's "spine," but also provides connections to the county and state highway systems via SR 101 south of town and to the north end of the Long Beach Peninsula. Continuous access between SR 101 and the north end of the Peninsula also is provided by Sandridge Road, which is located east of the city along the eastern shore of the Peninsula.

Other narrow, largely residential streets provide north-south connections through portions of the city. These include, in particular, Ocean Beach Boulevard one block west of SR 103, and Washington Avenue one to two blocks east of SR 103.

Most east-west streets in the city are short, extending two to three blocks east and west of SR 103. Aside from the continuation of the street grid south into Seaview, access to the county road system outside the city is available in only three locations: Pioneer Road (21st Street N) and Sid Snyder Drive (10th Street S) both link directly to Sandridge Road, and 2nd Street N connects to Sid Snyder Drive via V Street east of town.

7.1.b. STREET NETWORK EVALUATION

Local street connectivity is inadequate, particularly on the west side of SR 103 north of downtown. In this area, Ocean Beach Boulevard, immediately west of SR 103, is the only through north-south street. For all existing and future development along the beach and inland, it is the only link between the various east-west residential streets and it is the only local street link west of SR 103 between these residential areas and downtown. North-south local street connections, like Shoreview Drive, are needed west of Ocean Beach Boulevard.

As part of the Comprehensive Plan update, provisions should be made for developing a complete local street network that has good connectivity and provides convenient vehicular access and circulation throughout the city.

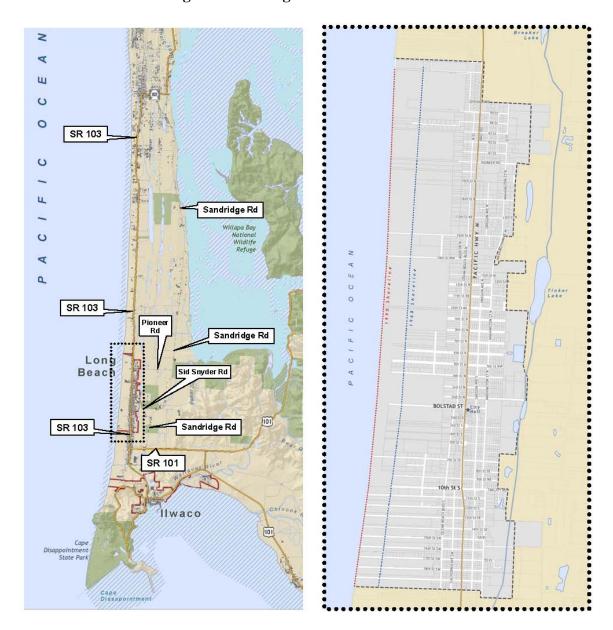


Figure E-21:Long Beach Street Network

7.1.c. Traffic Control Inventory

Intersection traffic controls on the Long Beach street system are shown in Figure E-22 (north) and in Figure E-23 (south). As shown in the Figures, there are two traffic signals on SR 103 (at Bolstad Avenue

and at Sid Snyder Drive), and there are a handful of intersections with all-way stop control (AWSC): Ocean Beach Boulevard at14th Street N, 9th Street N, 5th Street N, 17th Street S, and 20th Street S; Washington Avenue at 9th Street N, 2nd Street N and 5th Street S; and 5th Street S at Oregon Avenue. All other intersections have two-way stop control (TWSC – one street is controlled by a stop sign and the other is not).

The pattern of stop sign control on Long Beach streets gives priority to north-south through movement on virtually every north-south street, including SR 103, Ocean Beach Boulevard, Washington Avenue, Oregon Avenue (south of Bolstad Avenue only), and south of Sid Snyder Drive, on California Avenue and Idaho Avenue. Only on Oregon Avenue north of Bolstad Avenue are stops signs arranged to discourage north-south through movement. The city's system of stop sign controls give east-west traffic on Pioneer Road and on Sid Snyder Drive priority over north-south city street traffic; east-west traffic is given equal priority on 9th Street N, 2nd Street N and 5th Street S.

7.1.d. FUNCTIONAL CLASSIFICATIONS

The current Comprehensive Plan Transportation Element (adopted in 1998) defines three functional classes for the various streets in the city network: Arterials, Collectors, and Local Roads. The classes are defined as follows:

<u>Arterials</u> are streets that are relatively continuous, have relatively high traffic volumes, carry longer trips, and have higher operating speeds.

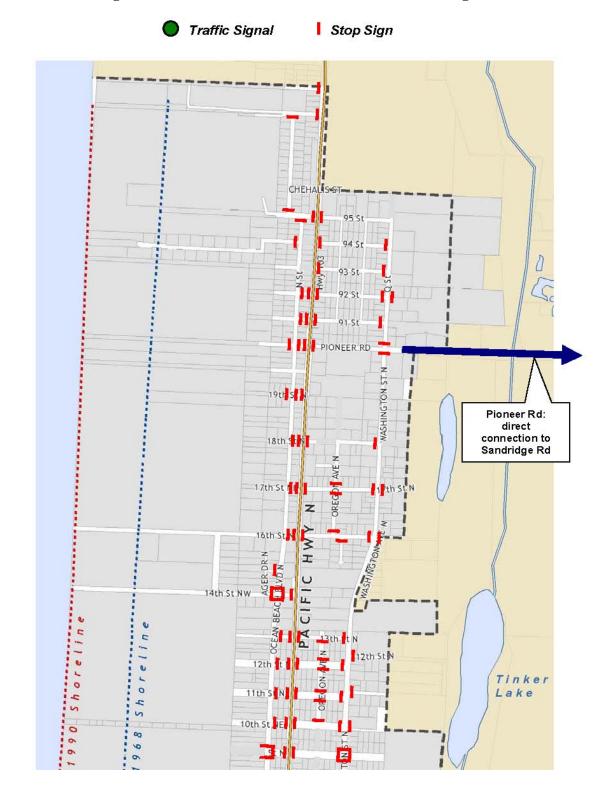
<u>Collectors</u> are streets that collect and distribute traffic between local roads and arterials.

Local Roads provide access to adjacent properties.

The city functional classifications are shown in Figure E-24. The Comprehensive Plan Transportation Element designates SR 103, Washington Avenue, Sid Snyder Drive, Ocean Beach Boulevard (2nd Street N to Sid Snyder Drive), Bolstad Avenue and 2nd Street N as Arterials. Ocean Beach Boulevard north of 2nd Street N and south of Sid Snyder Drive, Pioneer Road, Idaho Avenue, Oregon Avenue and California Avenue are designated as Collectors. All other streets are Local Roads.

As part of the Comprehensive Plan update, the city's entire functional classification system – the set of classification types, the definitions of the classification types, and the classification assigned to each city street – may be revised and refined as necessary.

Figure E-22: Intersection Traffic Control (North Long Beach)



Stop Sign Traffic Signal 8th t 5 h t 2nd St: connection to Sid Snyder Dr 4th t via V St 3rd t 2nd t BOLSTAD ST 2nd St S 3rd St 4 h St S 5 h St 7 h St St 10th St Sid Snyder Dr: direct connection to Sandridge Rd 15th St SW

Figure E-23: Intersection Traffic Control (South Long Beach)

Figure E-24: City of Long Beach Functional Classifications



Source: City of Long Beach Comprehensive Plan Transportation Element, 1998

7.2 Traffic Volumes

The 1999 Pacific County Long Beach Peninsula Transportation Study (LBPTS) included a thorough technical analysis of the Long Beach street system. That analysis contained a complete set of intersection traffic counts, operational analyses, and 2020 traffic forecasts and analyses for "typical" conditions and for peak (summer weekend) conditions. The 1998 and 2020 peak traffic volumes on the city arterial system are compiled in Figure E-25. As shown in the Figure, summer peak traffic volumes are expected to increase by as much as 40%-45%; this translates to a modest average growth rate of approximately 2% per year.

7.3 Traffic Operations

The LBPTS contained a complete set of intersection operational analyses for 1998 traffic counts and for 2020 traffic forecasts. The analyses were prepared for "typical" conditions and for peak (summer weekend) conditions. The results of the peak operational analyses are reported in this section.

7.3.a. Traffic Operations Analysis Methodology

Traffic operations analyses were based on the "Level of Service" (LOS) determined for each study intersection. The Highway Capacity Manual⁷, published by the Transportation Research Board and used nationwide, defines LOS as follows:

"Level of Service" (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with A representing the best operating conditions and F the worst. Each level of service represents a range of operating conditions and the driver's perception of those conditions. Safety is not included in the measures that establish LOS."

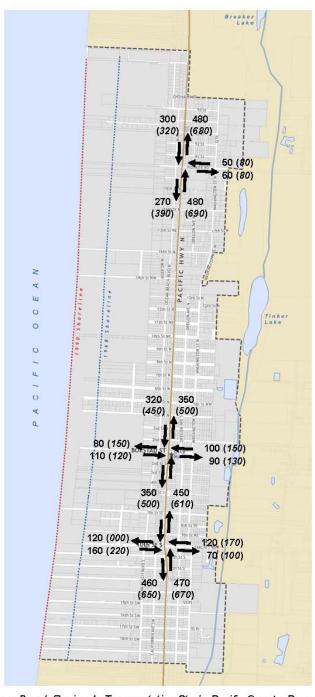
LOS is used by planners, engineers, and the lay public alike to assess traffic conditions, to identify problems, and to develop improvements and "solutions." In addition, local governments and other public agencies responsible for transportation use LOS to set standards for traffic conditions. LOS is determined for the peak 15 minutes of a 1-hour period. The traffic volumes on which LOS analyses are based can be traffic forecasts or actual traffic counts. In addition to traffic volumes, LOS is based on roadway characteristics (numbers and

Highway Capacity Manual (HCM2000), Transportation Research Board, National Research Council, 2000

⁸ Highway Capacity Manual (HCM2000), p. 2-2

configuration of lanes, lane width, roadway grade, etc.) and the types of traffic controls.

Figure E-25: Summer P.M. Peak Hour Traffic Volume (1999 Existing Conditions, 2020 Projections)



Source: Long Beach Peninsula Transportation Study, Pacific County, December, 1999

As implied in the definition above and outlined below, LOS is determined differently for different types of intersections (see Figure E-26).

<u>Signalized intersections</u>: LOS is determined for the intersection as a whole, and is based on average control delay – i.e., delay attributable to the traffic signal – for vehicles entering the intersection.

<u>All-Way Stop Control (AWSC) intersections</u>: LOS is determined for the intersection as a whole, and is based on average delay for vehicles entering the intersection.

Two-Way Stop Control (TWSC) intersections: LOS is determined for the individual "minor" movements (i.e., those movements that must stop or yield), and is based on average delay for vehicles entering the intersection.

Figure E-26: Intersection Level of Service

	AVERAGE DELAY		
	SIGNALIZED	AWSC	TWSC
LOS	INTERSECTIONS	INTERSECTIONS	INTERSECTIONS
A	≤ 10 sec/veh	≤ 10 sec/veh	≤ 10 sec/veh
В	10-20 sec/veh	10-15 sec/veh	10-15 sec/veh
С	20-35 sec/veh	15-25 sec/veh	15-25 sec/veh
D	35-55 sec/veh		25-35 sec/veh
		25-35 sec/veh	
Е	55-80 sec/veh	35-50 sec/veh	35-50 sec/veh
F	> 80 sec/veh	> 50 sec/veh	> 50 sec/veh
Source	HCM2000,	HCM2000,	HCM2000,
	Exh 16-2	Exh 17-22	Exh 17-2

7.3.b. Traffic Analysis Results

Results of the 1998 and 2020 peak period intersection traffic operations analyses are compiled in Figure E-27.

As shown in the table, the SR 103/Pioneer Road and SR 103/Sid Snyder Drive intersections would both operate at adequate LOS C conditions in 2020. The SR 103/Bolstad Avenue intersection already operates at an unacceptable LOS F, but the planned improvements – as specified in the LBPTS – would permit the intersection to operate at LOS C in 2020.

Figure E-27: Peak Hour Intersection Level of Service (LOS)

		1998		2020	
INTERSECTION	CONTRO L TYPE	LOS	DELAY (SEC/VE H)	LOS	DELAY (SEC/VE H)
SR 103 / Pioneer	TWSC	В	8	С	15
SR 103 / Bolstad with planned improvements	SIGNAL	F	75	F C	113 23
SR 103 / 10th St S	SIGNAL	В	7	С	15

Source: Long Beach Peninsula Transportation Study, Pacific County, 1999

7.3.c. EVALUATION OF TRAFFIC CONDITIONS

• Although the 1999 LBPTS is seven years old, its findings and recommendations are not out-of-date. An update of the LBPTS technical analyses is not recommended at this time, because its conclusions and recommendations are still applicable.

Updating the 1999 counts and existing conditions analyses to 2006 and updating the forecasts and future analyses to 2025 or 2030 would likely lead to the same basic conclusions as the 1999 LBPTS: that the SR 103/Bolstad intersection is congested and should be improved (the improvement project is programmed); that all other intersections have adequate capacity "on paper" to accommodate existing and future traffic volumes; and that various street, traffic control, and parking improvements can be considered for urban design and/or access/circulation improvement purposes.

• Although the technical analyses find that most Long Beach intersections have adequate capacity for even the highest peak season traffic volumes, the fact remains that SR 103 experiences serious congestion, particularly between Sid Snyder Drive and 5th Street N.

The explanation for the seeming contradiction between the analytical results and real world observations is that the very real congestion is not caused by excessive volumes of traffic that the street system cannot handle; rather, the congestion is caused by general downtown Long Beach activity, including pedestrian movement, parking maneuvers, high proportions of turns, and the slow way-finding of the many out-of-towners unfamiliar with the street system.

The conclusion is that much of the traffic in downtown Long Beach is local traffic, and that diversion of through traffic enroute to/from the north end of the peninsula would not eliminate the downtown congestion.

A Long Beach by-pass to the north end of the peninsula exists via Sandridge Road. Motorists wanting to avoid downtown Long Beach congestion on SR 103 can and do use Sandridge Road. Similarly, local traffic can and does use Washington Avenue and Ocean Beach Boulevard as an alternative for in-city trips, which may also help relive SR 103 congestion. If desired, development of roadway and signage improvements that may increase use of alternate north-south routes and help relieve SR 103 can be investigated.

7.4 4. Public Transportation

7.4.a. LOCAL/REGIONAL TRANSIT

Public transportation service in Long Beach is provided by the Pacific Transit System, which operates both fixed-route and "demand-responsive" ("dial-a-ride") services in Pacific County and the city of Long Beach. Pacific Transit's Route 20 operates on SR 103 through Long Beach, making 14 runs (each direction) between 5:30 a.m. and 6:30 p.m. on weekdays, and five runs between 10:00 a.m. and 5:30 p.m. on Saturdays (see Figure E-228).

7.4.b. Intercity Transportation

Pacific Transit System bus routes link Long Beach to Astoria, Oregon, to the south, to the cities of South Bend and Raymond in northern Pacific County, and to Aberdeen in Grays Harbor County to the north. No passenger rail or other intercity bus service is provided directly to Long Beach. Amtrak passenger rail service can be accessed in Vancouver, Longview, and Centralia, and Greyhound bus service can be accessed in Vancouver, Kelso, and Centralia.

TOKELAND RAYMOND BAY CENTER BEND SURFSIDE 311th SURFSIDE OYSTERVILLE **NEMAH** 295 th OCEAN PARK Joe Johns NAHCOTTA KLIPSAN Bay Ave OCEAN PARK No. 20 KLIPSAN Saturda BEACH Route 20 Map LONG BEACH LWACO ILWACO . CHINOOK MEGLER

Figure E-28: Long Beach Transit Service

Source: Pacific Transit website, September, 2006

7.5 Non-Motorized Transportation

7.5.a. EXISTING PEDESTRIAN AND BICYCLE FACILITIES

The 1998 Comprehensive Plan Transportation Element identifies several "Pedestrian and Bicycle Boulevards" that are intended to "provide alternate modes of travel within the city and the city service area." The designated Pedestrian and Bicycle Boulevards are:

State Route 103 Human-Powered Vehicle (HPV) Lane. The SR 103 HPV Lane is a striped bicycle lane on the west (southbound) side of SR 103 north of 4th Street N. and south of Sid Snyder Drive. Between 4th Street N. and Sid Snyder Drive the HPV shifts a block west to Ocean Beach Boulevard, where it is co-located with a sidewalk along the west (southbound) side of the street.

<u>Discovery Trail</u>. The Discovery Trail began as the Dune Trail, a paved boulevard between 14th Street N and 17th Street S located on the east (inland) side of the oceanfront dune area. The Discovery Trail now stretches 8.2 miles from 26th Street N through Seaview to Beard's Hollow on the south end of the beach, and inland to Main Street in Ilwaco. Two segments through the dunes and across the headlands to Ilwaco, totaling about 2.75 miles, are not paved; the remainder of the Discovery Trail is paved. Paving will be completed by 2009.

<u>Boardwalk</u>. The Boardwalk is a raised wood-plank walkway between Bolstad Avenue and Sid Snyder Drive located on the east (inland) side of the oceanfront dune area.

In addition to the Pedestrian and Bicycle Boulevards, there are paved sidewalks on both sides of SR 103 through the central "downtown" area.

It also should be noted that the city's fairly small block sizes create shorter street-to-street distances and make for a very "walkable" city by providing good pedestrian connectivity and accessibility.

7.5.b. EXISTING PEDESTRIAN AND BICYCLE ACTIVITY AND NEEDS

Heavy traffic makes SR 103 an unfriendly place for pedestrians and bicyclists, more and more of whom are avoiding SR 103 by using the parallel streets, Washington Avenue and to a much greater extent, Ocean Beach Boulevard. Unfortunately, these streets are narrow with no shoulder or sidewalk, and increasing local traffic volumes create more conflicts with pedestrians and bicycles in the street.

With its fairly level terrain and leisurely pace, Long Beach is ideally suited for high levels of walking and bike travel. Facilitation of convenient pedestrian and bicycle circulation can help reduce automobile use in a meaningful way.

As part of the Comprehensive Plan update, a comprehensive "non-motorized" transportation (pedestrian and bicycle) plan should be developed. The Non-Motorized Transportation Plan should identify a complete network of pedestrian and bicycle routes and connections, as well as the physical and traffic control improvements needed to make pedestrian and bicycle travel "attractively convenient" throughout the City, and to connect to other bike routes and trails on the Peninsula.

7.5.c. AVIATION

There are no airports in the City of Long Beach or on the Long Beach Peninsula north of the city; however, the Port of Ilwaco general aviation airport is easily accessible only a short distance to the south. Other general aviation airports fairly close to Long Beach include the Willapa Bay Airport in Raymond and the Astoria, Oregon, Airport (see Figure E-29). The closest commercial airports are Portland International and Seattle-Tacoma International.

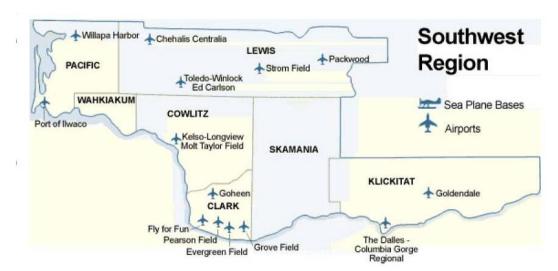


Figure E-29: Southwest Washington General Aviation Airports

Source: Washington State Department of Transportation Aviation Division website, September, 2006

7.6 Summary of Issues

Long Beach has the opportunity to improve mobility through the city by developing an infrastructure that supports walking and biking, as well as some sort of convenient transit. This may be more prudent than focusing only on a city form based on vehicles and parking. With large surges of tourists and cars during festival season, Long Beach will need to develop a series of wayfinding and parking management systems that will lessen the impact of these events on the residential population. An important regional access (Route 101) to Long Beach lies only several feet above sea-level along Willapa Bay and the Columbia River. Long Beach may need to work with the County and the State to plan for possible impacts of global climate change and rising sea levels on this access road.

8. CAPITAL FACILITIES

8.1 Fire

The Long Beach Volunteer Fire Department provides fire protection to the entire city. The City has an interlocal agreement with the City of Ilwaco and Pacific County Fire District No. 2 (Chinook) for an automatic response to Ilwaco for any confirmed structure fire. The City has a mutual aid agreement with Pacific County Fire District No. 1 for EMS and fire response.

The City is currently in the process of adding 4 bays in a building adjacent to the existing fire station. In spring 2007, the City placed into service a 95-foot ladder truck. There are no further plans on adding or replacing old fire engines.

The following is the inventory of facilities, equipment and staff:

- Facility 1 Fire Station,
- Equipment 4 engines,
- 1 aerial truck (75 feet),
- 1 ladder truck (95 feet),
- 2 wildland trucks (6x6),
- 1 "Gator" wildland vehicle (1600 gallons),
- 1 beach rescue vehicle (4WD 1/2-ton pickup),
- 1 basic life support ambulance
- Staff Up to 40 volunteer firefighters, including 1 part-time fire chief.

8.2 Law Enforcement

There are several accredited law enforcement agencies that serve the City of Long Beach and its surrounding areas. All these bodies work closely together to serve the community of Long Beach.

8.2.a. POLICE

The City provides police protection to the entire city population, as well as the City of Ilwaco. Following is the inventory of facilities, equipment and staff:

- Facility 1 Police Station,
- Equipment 8 police cars,
- 14WD,
- Staff 6 full-time police officers (including a police chief),
- 1 administrative assistant,
- 2 additional part-time foot patrol officers in the summer.

8.2.b. Washington State Patrol

Their duties are primarily related to the safety of state highways and beaches.

8.2.c. County Sheriff

The County Sheriff provides police protection to all unincorporated areas.

8.2.d. STATE PARK RANGERS

Their responsibilities are to protect State Parks as well as collaborate with the State Patrol to patrol beaches.

8.2.e. FISH AND WILDLIFE PROTECTION

The State Fish and Wildlife protection body has their responsibility primarily towards fishing and hunting violations.

8.2.f. U.S. COAST GUARD

District 13 of the U.S. Coast Guard has the jurisdiction to provide protection in all water bodies in the State of Washington. The Long Beach Peninsula is served by Coast Guard bases in Ilwaco and Astoria, OR.

8.3 Education

The City has an elementary school (grades 1-6). The school is located at 400 Washington Avenue S. As of January, 2007, there were 245 students and 45 employees. The building has recently been remodeled and an early learning center is being constructed. There are no other expansion plans. The building has a gymnasium that is used for assemblies, a cafeteria and kitchen, library and handicapped facilities. The City is served by a transportation system (bus) operated by Ocean Beach School District 101.

The middle and high schools that serve the city are in Ocean Beach District 101, and are located in the City of Ilwaco. The school capacity is 1,007 Head Count and 966 FTE. As of January, 2007, a new building is under construction. There are no further expansion plans, and the disposition of the existing building, which will only be partially used, has not been determined.

8.4 Medical and Emergency Facilities

The City is served by the Ocean Beach Hospital located in the City of Ilwaco. This is a Level IV Trauma Center, providing Emergency and Diagnostic Services. Over 7,000 patients are treated every year. There are no medical clinics in Long Beach; clinics are located in Ilwaco and Klipsan Beach.

Medix, a private for-profit ambulance service, began serving Long Beach, Chinook and Ilwaco in 2007. Pacific County Fire District 1, with stations in Ocean Park and Seaview, provides ambulance service to the rest of the Peninsula. Long Beach, Ilwaco

and Chinook have entered into an agreement with Fire District 1 for the provision of ambulance service should Medix not be available. Currently, Long Beach Fire Department can provide basic life support and has one ambulance.

Dental services are provided by 2 established dentists in Long Beach. There are two optometrists in the city. Ocean View Convalescent Center provides rehabilitation services and skilled nursing care.

8.5 Library

The City is served by the Timberland Regional Libraries located in the City of Ilwaco and Ocean Park. In April 2007, the Washington Legislature voted to allot to the city of Ilwaco \$2.7 million to renovate the building that currently houses the Ilwaco Timberland Regional Library and PACE⁹. Renovation plans include a variety of changes, including increasing space to more than twice the current size, moving the PACE dining center to the top floor and adding a meeting room.

8.6 City Hall and Community Meeting Space

The city currently lacks a significant public gathering space, beyond the elementary school gymnasium. The renovated Depot building offers meeting space for small 15-20 person gatherings. When not in session, the City Council Chambers are often used to host meetings. Several local motels have public meetings rooms available for rent that are used for meetings and special events.

8.7 Public Restrooms

There are 5 public restrooms in the city, 2 of which were constructed by State Parks but are maintained by the city. There are no plans for new public restroom services. Restrooms are located at 5th Street SW at Pacific Avenue; at the Police Station at 3rd Street SE and Pacific Avenue; in Culbertson Park; west of 3rd Street SW and south of the Bolstad Beach Approach; and at the west end of the Sid Snyder Drive Approach.

8.8 Public Parks

See the Parks, Open Space and Recreation Element.

8.9 Sewer System 10

Currently the majority of residences and commercial developments in Long Beach are connected to the City's sewer system. The city sewer service area is shown in Figure E-30. Unincorporated areas of the peninsula are on septic systems.

The collection system has six outlying pump stations. They pump to a main pump station and then into the treatment plant.

PAGE **E-68**

 $^{^9}$ The Observer, Library-PACE facility getting \$2.7 mil rebuild. By Amanda Frink.

¹⁰ This summary is based on the Sewer System Comprehensive Plan, prepared by Gray & Osborne, Inc. Consulting Engineers in May 1999. Updates were provided through interviews with city staff thanks to the aid of David Glasson.

8.9.a. Pump Stations

Sewer pump stations are located at the following locations:

- No. 1 South 15th Street and Oregon Avenue
- No. 2 South 4th Street and Oregon Avenue
- No. 3 North 12th Street and Oregon Avenue
- No. 4 North 17th Street and Oregon Avenue
- No. 5 North 26th Street and Ocean Beach Boulevard

Breakers Pump Station – North 26th Street West of Pacific Avenue

Main Pump Station – North 6th Street and Oregon Avenue

Legend City Limits Sewer Service Area

Figure E-30: Long Beach Sewer Service Area (2008)

8.9.b. SEWAGE OVERFLOWS

There are no overflow connections between the storm and sanitary sewers. There was one occasion during which excessive rainfall and flooding led to an overflow at the headworks of the treatment plant. During the period from December 27 through 28, 1994, flows reached 2.6 MGD, well in excess of the plant's 1.2 MGD peak capacity. With plant expansion in 2003-04, the overflow connection was cut and capped, eliminating any potential for future storm-related excess flows.

8.9.c. Wastewater Treatment Plant

The wastewater treatment plant is located off Washington Avenue between Sixth and Seventh Streets NE, and is entered from 6^{th} Street NE. The design criteria for the existing wastewater treatment plant are presented in Figure E-31.

Figure E-31: City of Long Beach Wastewater Treatment Plant Design Criteria¹¹

PARAMETER	CRITERIA
Average Daily Flow Rate at Design	0.400 MGD
Peak Hourly Flow Rate	1.200 MGD
Influent Biological Oxygen Demand	800 lbs/day
Influent Total Suspended Soils	834 lbs/day
Design Population Equivalent	4,000 people

Source:

8.9.d. BIO-SOLIDS DISPOSAL

The forest application site is located east of the city about 2.5 miles from the treatment plant. The land is owned by the City of Long Beach and 81 acres of the property is used for sludge application. The size of the site was recently increased from 75 acres, of which 30 acres were utilized for application. There are no known residences, developments, or wells within one-half mile of the site.

The City plans to continue with the forest land application system. However, the 1999 Sewer System Comprehensive Plan proposes an additional alternative that involves combined City and contracted land application. This alternative would allow the city to send biosolids to the contractor during periods of precipitation or frozen ground. With two disposal options, the City can more readily adjust to changes.

¹¹ Source: City of Long Beach Sewer System Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 5. *Existing Conditions*.

8.9.e. EXPECTED GROWTH

Most residential and commercial development is assumed to occur in the Netarts soils which run along the spine of the peninsula, parallel to SR 103. Presently the city is approximately 70% developed. The area served by the Long Beach Wastewater Treatment Plant includes all areas within the municipal boundaries. The most recent addition to the service area is from Pioneer Road north to the Breakers.

In the 1997 Comprehensive Plan, the UGA was proposed to be expanded 350 feet northward (to 101st Lane) west of SR 103 by 2006, and a total of 2,150 feet northward (to approximately 113th Street) by 2016.

According to the 1997 Comprehensive Plan, future land use regulations should be designed to encourage more multi-family housing and keep resorts, hotels and other tourist amenities close to the historic old town center. The majority of the growth within the City of Long Beach is expected to occur in the dune area to the west of Ocean Beach Boulevard, and to the north of Pioneer Road. Although sanitary sewer service is available, it requires the use of small pressure lines and a regional lift station; a few properties still have septic systems.

New gravity lines, pump stations, and force mains that are necessary to serve new development will be primarily developer-funded. However, costs for the main trunk lines and any necessary lift stations are included in the City's Capital Improvement Plan (CIP). The City may elect to build these improvements and charge development for them through latecomer fees. Facilities for existing areas that are not currently served may be built by forming a Local Improvement District (LID).

The maximum flow is expected to increase by 15 percent during the 20-year design period. The current maximum flow is 1.2 million gallons per day, following the 2003-04 upgrade to the wastewater treatment plant.

8.9.f. POPULATION PROJECTIONS

Due to the difficulty in defining an accurate transient population in Long Beach, the wastewater flows and loadings are based on resident population with the assumption that transient population will grow at approximately the same rate as resident population.

_

¹² City of Long Beach, Sewer Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 7 *Collection System Improvements and Expansion*.

The City exhibits a development pattern typical of resort communities, with seasonal populations often doubling the year-round population. The City and surrounding unincorporated area are popular sites for vacation and retirement homes, and this is expected to continue or increase as the baby boomers approach retirement age. No information is available on the population of transient visitors. Projected resident populations used in the Sewer System Comprehensive Plan are summarized in Figure 32.

Figure E-32: Projected Resident Populations¹³

YEAR	POPULATION*
2003	1,578
2008	1,775
2013	1,972
2018	2,191

^{*}From Sewer System Comprehensive Plan May 1999; may differ from actual population projections for planning period.

8.9.g. Connection Charge¹⁴

As of 2007, and per Ordinance No. 779 (December 1, 2003), sewer connection capital charges are \$2,500.00, with an additional hookup fee charge of \$2,500.00 per unit for multi-unit residential developments. The unit or units chargeable in addition to the basic charge are as set out in Figure E-33. The unit fee consists of \$1,250.00 for sewer hookup. The sewer unit fee for hotel/motels is \$875 for each additional rentable unit.

LONG BEACH COMPREHENSIVE PLAN UPDATE 2026 APPENDIX AUGUST 2008

¹³ Source: City of Long Beach Sewer System Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 3. *Land Use, Population and Planning.*

¹⁴ City of Long Beach, Ordinance No. 779. Long Beach Washington.

Figure E-33: Sewer Connection Fees¹⁵

Single Family Dwelling	1 Unit	
Multiple Family Dwellings	1 Unit per living unit	
Schools	1 Unit per 20 students	
Motels and Hotels	1 Unit per rentable unit	
Motel and Hotel Laundry Rooms	1 Unit per 2 washers	
Mobile Home/RV Parks	1 Unit per 2 trailer spaces	
Laundry/recreational-Mobile/RV Parks	1 Unit per 2 washers	
Restaurant	1 Unit per 10 seat capacity	
Hospital and other institutions	1 Unit per 3 beds	
Commercial and Industrial	1 Unit per 9 Employees or fraction thereof.	
Launderette	1 Unit per 2 washers	
Auto Service Station	2 Units	
Car Wash	4 Units for each 3 stalls or fraction thereof.	
Public Meeting Places (includes theaters and churches)	1 Unit per 200 seat capacity	

Any users not defined above: To be set by Director of Public Works subject to approval of the Council.

8.9.h. RATES

Sewer user rates are described in Ordinance 778 and are increased each year according to the cost of living index. ¹⁶ Currently there is no linkage between sewer rates and water use. Such a linkage would encourage water conservation and create more equitable sewer rates by linking rates to the approximate quantity of wastewater flow. Further study of the City's sewer rate structure options is recommended. ¹⁷

17 Ibid

¹⁵ City of Long Beach, Ordinance No. 779. Long Beach Washington.

¹⁶ City of Long Beach, Sewer Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 11. *Financing Program*

Figure E-34: Sewer Rates in the City¹⁸

SEWER TYPE	2003	2004	2005	2006
Single Family Residence	\$24.71	\$25.45	\$26.21	\$35.91
Apartments, Per Unit	\$24.71	\$25.45	\$26.21	\$35.91
Motels, Base Charge	\$32.95	\$33.94	\$34.96	\$47.89
Motels, each additional rental	\$5.59	\$5.76	\$5.93	\$8.12
Condominiums, each rental	\$24.71	\$25.45	\$26.21	\$35.91
Mobile Home Parks, each rental space	\$24.71	\$25.45	\$26.21	\$35.91
Trailer Parks, Base Charge	\$32.95	\$33.94	\$34.96	\$47.89
Trailer Parks, each hookup	\$4.12	\$4.24	\$4.37	\$5.99
Laundromats, self-service & Dry Cleaning	\$113.27	\$116.67	\$120.17	\$164.63
Industrial Laundry	\$205.85	\$212.03	\$218.39	\$299.19
Car Washing Facilities	\$113.27	\$116.67	\$120.17	\$164.63
Canner Operations	\$113.27	\$116.67	\$120.17	\$164.63
Restaurants, Taverns (first 20 person capacity)	\$47.17	\$48.59	\$50.04	\$68.56
Restaurants, Taverns (each additional 5 person capacity)	\$3.61	\$3.72	\$3.83	\$5.25
Schools Summer Rate	\$61.74	\$63.59	\$65.50	\$89.73
Schools Sept. May (each occupant)	\$1.75	\$1.80	\$1.86	\$2.54
Nursing Homes, Convalescent Center base charge	\$28.85	\$29.72	\$30.61	\$41.93
Nursing Homes, Convalescent Center each patient bed available	\$5.59	\$5.76	\$5.93	\$8.12
Service Station	\$32.95	\$33.94	\$34.96	\$47.89
Churches, municipal parks & buildings	\$37.08	\$38.19	\$39.34	\$53.89
Theaters, large stores, banks, medical & Dental clinics, mortuaries & beauty shops	\$37.82	\$38.95	\$40.12	\$54.97
Fraternal Halls, per floor	\$53.55	\$55.16	\$56.81	\$77.83
Business offices, small stores & optometrist	\$26.87	\$27.68	\$28.51	\$39.05
State Parks Restroom Facilities	\$79.92	\$82.32	\$84.79	\$116.16

8.9.i. COLLECTION SYSTEM ALTERNATIVES

The majority of the growth within the city is assumed to occur in the dune area to the west of Ocean Beach Boulevard and to the north of Pioneer Road. The northern areas currently have limited service by sanitary sewers and are connected to the city system via private systems including grinder pumps and pressure mains. In chapter 7 of

-

¹⁸ City of Long Beach, Ordinance No. 778. Section 4, Sewer Rates and Charges. Long Beach Washington.

the referenced Plan, collection system alternatives and improvements are recommended to serve existing sewer customers and future development.¹⁹

8.9.j. WATER REUSE OPTIONS

There are no plans or projects in regards reuse of treated effluent. However the Sewer System Comprehensive Plan presents a possible strategy using a non-potable source at the treatment plant. The necessary upgrades to the treatment plant in order to achieve this option are presented in the referenced Plan.²⁰

8.9.k. EFFLUENT DISPOSAL ALTERNATIVE

The City's plan for effluent disposal is to continue the discharge to Willapa Bay via Tinker Lake.

8.10 Water System 21

The City of Long Beach as of 2006 serves about 1,860 connections including approximately 792 residential and 271 non-residential connections within the city limits, and approximately 682 residential and 115 non-residential connections outside city limits.

The average daily residential water use is 108 gallons per residential connection. Water usage has been approximately 48 percent residential and 52 percent non-residential. The largest single users are two motels with 3-inch water meters; together, they account for 5.2 percent of all water use.

Annual water production has ranged from 254 million gallons (MG) in 1997 to 164 MG in 2002. The reduction is due to more efficient operation of the treatment plant. The water system has grown at an annual rate of approximately 1.54 percent over the past 10 years and is projected to continue growing at the same rate. Annual water demand is projected to increase from 176 MG in 2005 to a projected 239 MG in 2025.

8.10.a. Source of Supply

The City of Long Beach pumps and treats raw surface water obtained from two impoundments located east of the City: the Yeaton/Baker Impoundment, which has been improved to provide storage of about 10 MG behind the earth-fill dam, and the Dohman Creek Impoundment with a current storage capacity of 19 MG. In addition to

¹⁹ Ibid

²⁰ City of Long Beach, Sewer Comprehensive Plan. May 1999 Gray & Osborne, Inc. Consulting Engineer. Chapter 10 *Wastewater Treatment Plant Improvements*.

²¹ This summary is based on the Comprehensive Water System Plan, prepared by Gray & Osborne, Inc. Consulting Engineers in April 2005. Updates were made from interviews with staff, thanks to the aid of David Glasson.

these two major impoundments, an average of 1.9 MG of water from Matticks Creek has been pumped into the Yeaton/Baker Reservoir during the summer months to augment storage. Another source, as yet undeveloped, is Riekkola Creek. The City does not currently utilize any groundwater wells as source of supply. There are only timber lands and no developed properties upstream of the source of supply, which helps to protect water quality.

8.10.b. WATER SERVICE AREA

The City of Long Beach covers a large area (see Figure E-35), including the incorporated city, Seaview to the south, the area north of the city to Cranberry Road. The service area extends eastward to include the treatment plant and surrounding area.

CITY OF LONG BEACH

Figure E-35: Long Beach Water Service Area

Source: Comprehensive Water System Plan, April 2005, Gray & Osborne

8.10.c. BOOSTER PUMP SYSTEM

A booster pump station is located near the corner of 67th Place and Sandridge Road. Only a few customers located between the booster pump station and the reservoir are not served by the booster station. The existing booster pump station can supply peak hour demands and fire flow demands. It is projected to maintain 30 psi throughout the six-year planning period and 20 psi throughout the twenty-year planning period.

8.10.d. Transmission System

The transmission system consists of two sections: transmission of raw water from the impoundments to the treatment plant and transmission of treated water from the storage reservoirs to the distribution grid. The finished water transmission line runs from the storage reservoir to the booster pump station. The existing distribution system is shown in the 2005 Water System Comprehensive Plan.²²

8.10.e. POPULATION ESTIMATES²³

Since the City of Long Beach water system service area is not a defined political boundary, there are no OFM population estimates for the area. The OFM estimates the number of persons per household for the City of Long Beach is 1.9 persons per household. However, based on residential water connections within city limits for 2002 and OFM population estimates, there were actually 1.7 persons per residential water meter.

The average population growth for the ten-year period from 1993 to 2002 was 1.54 percent. This growth rate is used to calculate future water system demands.

Seasonal and transient population are not estimated in this analysis. Water use by seasonal and transient population is represented by the water use record. Seasonal and transient water use will be assumed to grow proportionally with all other water use.

²² City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 1 *Water System Description*.

²³ In a memorandum in August 2005, and by request of the City, a second analysis with an aggressive rate of 5% population increase was made. With the higher rate, additional instantaneous water rights would be needed by 2006 instead of 2015. Additional water treatment capacity would be needed by 2006 instead of 2015 and additional storage would be needed by that same year.

8.10.f. PROJECTED POPULATION GROWTH AND SYSTEM CONNECTIONS REQUIREMENTS.

The average annual growth rate over the past 10 years has been 1.54 percent. That growth rate is used to project future population growth, as shown in Figure E-36.

Figure E-36: Projected Population, Water Service Area²⁴

YEAR	PROJECTED SERVICE AREA POPULATION*	PROJECTED TOTAL CONNECTIONS
2003	2,532	1,889
2004	2,571	1,918
2005	2,611	1,948
2006	2,651	1,978
2007	2,692	2,008
2008	2,734	2,040
2009	2,776	2,071
2010	2,818	2,102
2015	3,042	2,269
2020	3,284	2,450
2025	3,544	2,644

^{*}From Water System Comprehensive Plan; may differ from actual population projections for planning period

8.10.g. SOURCE CAPACITY

The recommended capacity to meet projected maximum day demand within 18 hours of pumping will exceed the existing source capacity by the year 2015. If allowed to pump 24 hours per day, projected maximum day demand through 2025 can be met.

8.10.h. STORAGE CAPACITY

Projected Water Production Requirements, as shown in the 2005 Water System Plan, are presented in Figure E-37.

PAGE **E-80**

²⁴ Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 2. *Basic Planning Data*

Figure E-37: Water Production Requirements²⁵

YEAR	PROJECTED SERVICE AREA POPULATION*	AVERAGE DAY PRODUCTION REQUIREMENT GPD
2003	2,532	468,500
2004	2,571	475,700
2005	2,611	483,100
2006	2,651	490,500
2007	2,692	498,100
2008	2,734	505,800
2009	2,776	513,600
2010	2,818	521,400
2015	3,042	562,800
2020	3,284	607,600
2025	3,544	655,700

^{*}From Water System Comprehensive Plan; may differ from actual population projections for planning period

With a projected population of 3,544 by 2025, storage capacity will not become a limiting factor. Figure E-38 shows effective storage requirements for the City of Long Beach compared to available effective storage capacity and indicates a future storage surplus through the year 2025.

Figure E-38: Water Storage Requirements²⁶

YEAR	EFFECTIVE STORAGE REQUIREMENT (GALLONS)	AVAILABLE EFFECTIVE STORAGE (GALLONS)	STORAGE SURPLUS/DEFICIT (GALLONS)
2007	974,600	1,504,000	529,400
2008	983,700	1,504,000	520,300
2009	992,600	1,504,000	511,400
2010	1,001,500	1,504,000	502,500
2015	1,049,500	1,504,000	454,500
2020	1,101,300	1,504,000	402,700
2025	1,156,900	1,504,000	347,100

²⁵ Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 2. *Basic Planning Data*

²⁶ Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 3. *System Analysis*

8.10.i. System Capacity Limit

Figure E-39 summarizes ERU (Equivalent Residential Unit) limits based on the various limiting factors evaluated in the Water System Comprehensive Plan 2005. Source capacity to meet system demands in 18 hours of water production is the current system-limiting factor, followed by instantaneous water rights to meet system demands in 18 hours of water production. Existing storage capacity and annual water rights are not currently limiting factors.

Figure E-39: Water System Capacity Limits²⁷

LIMITING FACTOR	ERU LIMIT
Source Capacity, 18 hr/day	4,890
Instantaneous Water Rights, 18 hr/day	5,124
Source Capacity, 24 hr/day	6,520
Instantaneous Water Rights, 24 hr/day	6,832
Existing Storage Capacity	7,730
Annual Water Rights	7,960

8.10.j. Peak Hour Analysis

According to WAC 246-290, a water system must maintain a minimum pressure of 30 psi in the distribution system under peak hour demand conditions. Peak Hour Analysis for 2010 and 2025 revealed no system deficiencies. The minimum system pressure under Peak Hour Conditions occurs at Washington Avenue and 18th Street North.

8.10.k. Available Fire Flow Analysis

The Washington Department of Health Water System Design Manual states that a water system should be designed to provide adequate fire flow under maximum day demand conditions while maintaining a minimum system pressure of 20 psi.

Based upon fire flow model runs, the City's water system cannot currently meet the fire flow requirements in several areas. Figure E-40 illustrates these deficiencies. Line upsizing is included in the 2006 6-year plan.

²⁷ Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 3. *System Analysis*

Figure E-40: Areas with Fire Flow Deficiencies²⁸

MAP REFERENCE AREA ²⁹	REQUIRED FIRE FLOW (GPM)	AVAILABLE FIRE FLOW IN 2010 (GPM)	MEETS FIRE FLOW REQUIREMEN T?	CAUSE OF DEFICIENCY
Area A	1,000	650 – 850	NO	DEAD END WATER MAINS, UNDERSIZED TRANSMISSION MAIN.
Area B	1,000 – 1,500	850 – 1,000	NO	DEAD END WATER MAINS, UNDERSIZED TRANSMISSION MAIN.
Area C	500	600 - 750	YES	NONE
Area D	500	580 – 750	YES	NONE
Area E	1,000 – 1,500	970 – 1,180	NO	UNDERSIZED TRANSMISSION MAIN.
Area F	1,000 – 1,500	1,100 – 1,300	NO	UNDERSIZED TRANSMISSION MAIN.
Area G	1,500	1,450 – 2,000	YES	NONE
Area H	1,000	1,150 – 1,800	YES	NONE
Area I	1,000	1,880 – 2,100	YES	NONE
Area J	1,000	750 – 1,250	NO	INSUFFICIENT LOOPING
Area K	1,500	1,500 – 2000	YES	NONE
Area L	1,500	1,250 – 1,450	NO	INSUFFICIENT LOOPING, UNDERSIZED DISTRIBUTION MAINS.
Area M	1,000	1,050 – 1,300	YES	NONE
Area N	1,000 – 1,500	1,050 – 1,250	NO	UNDERSIZED TRANSMISSION MAIN.

8.10.1. CONNECTION CHARGE

As of 2007 and per Ordinance 779 (December 1, 2003), water connection capital charges are \$2,500.00, with an additional hookup fee charge of \$2,500.00 per unit for multi-unit residential developments. The unit or units chargeable in addition to the basic charge are as set out in Figure E-41. The unit fee consists of \$1,250.00 for water hookup. The unit fee for water for hotel/motels is \$875 for each additional rentable unit.

²⁸ Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer. Chapter 4. *Hydraulic Modeling*

²⁹ Figure 4-1 from the Water System Comprehensive Plan, presents the reference map of these deficiencies.

Figure E-41: Water Hookup Units³⁰

Single Family Dwelling	1 UNIT	
Multiple Family Dwellings	1 UNIT PER LIVING UNI	
Schools	1 UNIT PER 20 STUDENTS	
Motels and Hotels	1 UNIT PER RENTABLE UNIT	
Motel and Hotel Laundry Rooms	1 UNIT PER 2 WASHERS	
Mobile Home/RV Parks	1 UNIT PER 2 TRAILER SPACES	
Laundry/recreational-Mobile/RV Parks	1 UNIT PER 2 WASHERS	
Restaurant	1 UNIT PER 10 SEAT CAPACITY	
Hospital and other institutions	1 UNIT PER 3 BEDS	
Commercial and Industrial	1 UNIT PER 9 EMPLOYEES OR FRACTION THEREOF.	
Launderette	1 UNIT PER 2 WASHERS	
Auto Service Station	2 UNITS	
Car Wash	4 UNITS FOR EACH 3 STALLS OR FRACTION THEREOF.	
Public Meeting Places (includes theaters and churches)	1 UNIT PER 200 SEAT CAPACITY	
Any users not defined above	TO BE SET BY DIRECTOR OF PUBLIC WORKS SUBJECT TO APPROVAL OF THE COUNCIL.	

In addition to the Water Connection fee, Water Installation fees for parts, labor and equipment are charged as follows (2007):

- Labor is figured @ \$18.75 per hour
- Parts are sold at city cost
- Backhoe is figured @ \$56.25 per hour
- Push Machine is figured @ \$37.50 per hour
- Any unusual cost assessed by the water and sewer supervisor
- Hourly rate is figured as the time the labor and/or equipment is at the job site rounded to the nearest 15 minutes.

8.10.m. RATES

The rates and charges for water service to lots connected to the water system within the corporate limits of the city are fixed and established by Ordinance No. 778 (December 1, 2003). The minimum monthly rate charge is based on meter size, and location in or out of the city, as shown in Figures E-42 and E-43.

³⁰ City of Long Beach, Ordinance No. 779. Long Beach Washington.

Figure E-42: Water Service Monthly Charge Inside City Limits³¹

METER SIZE	2003	2004	2005	2006
Residential 3/4 1"	\$18.60	\$19.16	\$19.73	\$20.32
Commercial 3/4 1"	\$22.12	\$22.78	\$23.47	\$24.17
Commercial 1.5"	\$26.30	\$27.09	\$27.90	\$28.74
Commercial 2"	\$38.00	\$39.14	\$40.31	\$41.52
Commercial 3"	\$51.63	\$53.18	\$54.77	\$56.42

Figure E-43: Water Service Monthly Charge Outside City Limits³²

METER SIZE	2003	2004	2005	2006
Residential 3/4 1"	\$27.90	\$28.74	\$29.60	\$30.49
Commercial 3/4 1"	\$33.18	\$34.18	\$35.20	\$36.26
Commercial 1.5"	\$39.45	\$40.63	\$41.85	\$43.11
Commercial 2"	\$57.00	\$58.71	\$60.47	\$62.29
Commercial 3"	\$77.45	\$79.77	\$82.17	\$84.63

8.10.n. Commodity Charge.

The monthly commodity charge (or excess rate) is charged for each 100 cubic feet of water in excess of the 400 cubic foot minimum allowed per month thereof, as follows:

Figure E-44: Commodity Charge Inside City Limits³³

	2003	2004	2005	2006
Subservice Charge	\$1.95	\$2.01	\$2.07	\$2.13
Nursing Home / Bed	\$0.74	\$0.76	\$0.79	\$0.81
Commodity / 100 cu ft.	\$3.33	\$3.43	\$3.53	\$3.64

³¹ City of Long Beach, Ordinance No. 778. Section 2, Water Rates and Charges. Long Beach Washington.

³² Ibid.

³³ Ibid.

Figure E-45: Commodity Charge Outside City Limits³⁴

	2003	2004	2005	2006
Subservice Charge	\$2.93	\$3.02	\$3.11	\$3.20
Nursing Home / Bed	\$1.12	\$1.15	\$1.19	\$1.22
Commodity / 100 cu ft.	\$3.33	\$3.43	\$3.53	\$3.64

8.10.o. Capital Improvement Program

WATER SUPPLY SOURCE

Current installed pumping capacity does not match instantaneous water rights for individual sources. To remedy this situation, the City will file a change application with the Department of Ecology to increase allowable instantaneous withdrawal.

By 2015, additional instantaneous water rights will be required. Since the process for obtaining additional water rights can take time, the City will begin the process during this 6-year planning period.

Storage capacity and treatment plant efficiency has been increased, thereby reducing the need for raw water pumping capacity. The two 30-horsepower pumps are adequate at this time, producing 525 gpm, but could be increased in size if needed to produce the maximum capacity of 673 gpm.

WATER TREATMENT

Additional Treatment Capacity

Between 2010 and 2015 additional water treatment capacity would be required. By 2025, it is projected that the water treatment plant will need to increase capacity to 1.85 MGD. Improvements on the process of sedimentation, filtration and disinfection would satisfy the expected requirements. The City is preparing plans for a new plant, with an estimated construction start in 2010.

Additional Laboratory/Office Space

To provide additional space at the water treatment plant, the City plans to construct a new building to the west of the existing utility building. The new building would be approximately 600 to 800 square feet.

BOOSTER PUMP STATION

The booster pump station will be provided with auxiliary power. Since there is not an electrical substation in the vicinity of the booster station, providing a second power feed is not a practical alternative. A

-

³⁴ Ibid.

diesel-powered auxiliary generator is recommended at the booster station for continuity of operations and maintenance activities.

8.10.p. Water Distribution

Deficiencies generally consist of undersized water mains or areas with dead ends or inadequate looping. In the previous water system plan, reservoirs at the north and south end of the distribution system had been contemplated to improve fire flow in these areas. However, the City has elected not to build storage in these areas due to the lack of elevation and aesthetic concerns with elevated tanks. The City instead elected to construct new storage to the east of the City near the existing reservoir. As a result, improvements to correct the deficiencies focus on increasing main sizes and looping dead-end water mains.

Figure E-46: Capital Improvement Schedule (Prioritized)³⁵

CLARIFY EXISTING WATER RIGHTS	2005
Replace Finished Water Pumps	2005
Obtain Additional Instantaneous Water Rights	2006
Stage 1 DBPs sampling	2006
Cross Connection Control Surveys	2006
Negotiate MOU with commercial timber owners	2006
Post signs at all entrances to watershed/emergency phone numbers	2006
Link with Willapa Bay National Wildlife Refugee	2006
Public Works Director to review all Forest Project Applications	2006
Additional Raw water pumping capacity	2007
Additional Treatment Capacity	2007
Additional Laboratory	2007
Algae control	2007
Upgrade Chlorination Facilities	2007
Improve Backwash Basin Discharge	2007
Install new control system	2007
Install a 50 kW auxiliary generator	2007
Maintain a current watershed activity file	2007
Install 300 LF of 8 inch water main on 28 th Street NW	2008
Replace 70 LF of 4 inch with 12 inch water main on Bolstad across Ocean Beach Blvd	2009
Install 4,750 LF of 6 inch with 12 inch water main on Ocean Beach Boulevard	2009
Install 300 LF of 8 inch water main on 6 th Street North across SR 103	2010
Replace 1,000 LF of 2 inch ad 4 inch with 8 inch water main on 17 th Street South	2011
Install 430 LF of 8 inch water main on 18 th Street South	2011
Replace 530 LF of 3 inch with 8 inch water main on 43 rd Street South	2011
Replace 820 LF of 2 inch, 4 inch and 6 inch water main on 32 nd Street South	2011
Update Water Comprehensive Plan	2011
Implementation of Conservation Program	2006-2011
Consumer Confidence Report	2006-2011

_

 $^{^{\}rm 35}$ Source: City of Long Beach Water System Comprehensive Plan. July 2005 Gray & Osborne, Inc. Consulting Engineer.

8.11 Stormwater Management^{36,37}

The corporate limits of the City of Long Beach encompass approximately 700 acres. The city is divided into 4 main stormwater basins and 9 sub-basins. Figure E-47 and Figure E-48 describe these and their drainage flows.

Figure E-47: Drainage Basins Description³⁸

BASIN	AREA	DRAINAGE/FLOW	
South Main Basin	100 acres	Drains south to the Pacific Ocean	
East Main Basin	200 acres	North and East to the Willapa Bay	
	80 acres	Drains to a pump station that discharges to the Pacific Ocean	
West of the Secondary dune	300 acres	Discharge to the Pacific Ocean	

³⁶ This summary is based on the Stormwater Management Plan, prepared by Gray & Osborne, Inc. Consulting Engineers in March 1998. Updates were made from interviews with staff thanks to the aid of David Glasson.

³⁷ The City is preparing an update of the Stormwater Management Plan in 2007.

³⁸ Source: City of Long Beach Stormwater Management Plan. March 1998 Gray & Osborne, Inc. Consulting Engineer. Chapter 2. *Planning Area Characteristics*.

Figure E-48: Drainage Sub-Basins Description³⁹

SUB BASIN	AREA	LOCATION	DRAINAGE/FLOW
1	37 acres	16 th St. N to 26 th St. N and between SR 103 and Washington St.	Towards Pioneer Road and then eastward along Pioneer Road to a ditch leading into the East Main Channel
2	30 acres	Between 10 th St. N. and 16 th St. N, and east of SR 103	To the East Main Channel from an outfall located between 12 th St. N and 13 th St. N
3	25 acres	10 th St. N to 3 rd St. N east of SR 103	Southward along Washington Ave. to 7 th St. N eastward on 7 th St. N and then southward on Oregon Ave. to the pump station at 3 rd St. N
4	24 acres	Between 5 th St. S and 3 rd St. N and east of SR 103	Along Oregon Ave. and conveyed northward to the pump station at 3 rd St. N
5	22 acres	5 th St. S to Sid Snyder Drive and east of SR 103	Along Oregon Ave. to Sid Snyder Drive and discharges into the east-west main on Sid Snyder Drive
6	25 acres	From 20 th St. S to Sid Snyder Drive and roughly between California Ave. and the crest of the dune west of Ocean Beach Boulevard	Northward along California Ave. to the east-west main on Sid Snyder Drive and then to the South Main
7	22 acres	20 th St. S to Sid Snyder Drive between California and Washington Avenues	Northward along SR 103 to the east-west main on Sid Snyder Drive and then to the South Main Channel
8	74 acres	2 nd St. to about milepost 2.93 on SR103 and between SR 103 and the crest of the dune of Ocean Beach Blvd.	Along SR103 and the crest of the secondary dune westward on 12 th St. N to the pump station on the west side of Ocean Beach Blvd.
9	8 acres	Along Ocean Beach Blvd from Bolstad Avenue to Sid Snyder Drive	Drainage is confined to the basin where it infiltrates.

³⁹ Ibid.

Figure E-49: Precipitation Event Totals⁴⁰

STORM	PRECIPITATION (INCHES)
6 month/24 hour	1.9
2 year/24 hour	3.0
10 year/24 hour	4.5
35 year/24 hour	5.0

Figure E-50: Projected Population⁴¹

YEAR POPULATION	
1995	1,365
2000	1,394
2005	1,434
2010	1,476
2015	1,520
2020	1,565
2025	1,611

^{*}From Stormwater Management Plan 1998; may differ from actual population projections for planning period.

8.11.a. System Issues

- Drainage Basin 1 There have been no observations of flooding.
 Problems are primarily related to pipe sizes.
- Drainage Basin 2 An area of concern is the RV park located north of 15th Street N. Residents of the trailer park indicated that the area floods to a depth of one foot or more during large precipitation events.
- Drainage Basin 3 Pipes between 4th Street N and 5th Street N are inadequate to convey flows predicted for the 10-year design. Flooding upstream of this point has not been confirmed
- Drainage Basin 4 The majority of the pipe sections along Oregon Avenue are inadequate for the 10-year design. Two sections were also shown to be inadequate for the 2-year design, with the most severe restriction occurring at the 12-inch culvert under 2nd Street

⁴⁰ Ibid.

⁴¹ Ibid.

- N. There has been no confirmation of specific flooding or ponding problems.
- Drainage Basin 5 No reports of flooding along Oregon Avenue were received. However, the City reported ponding problems along Washington Avenue between 5th Street S and Sid Snyder Drive.
- Drainage Basin 6 No mention of flooding has been received. However, the area is primarily an older residential neighborhood, and the California Avenue system is an older, shallow system of 8-inch and 12-inch pipes laid at very shallow slopes. Due to the small pipes and the shallow pipe gradients, the entire system is indicated in the model as inadequate.
- Drainage Basin 7 Ponding problems on SR 103 have not been reported. However, vacant lots along SR103 accumulate large ponds during relatively minor rain events. The existing conveyance system was installed as part of a paving project in 1992 by Washington State DOT. The DOT report indicates that the system was sized for the roadway only. As the area develops commercially, the pipes between 14th Street S and Sid Snyder Drive are inadequate to convey the predicted flows for the 10-year design.
- Drainage Basin 8 –As with Basin 7, the paving project from DOT did not account for the larger basin area. With the assumption that the area will develop commercially, the model indicates that the pipes downstream of 10th Street N and 17th Street N are inadequate to convey the predicted flows for the 10 year design. Ponding has been reported in lots adjacent to SR103 and along Ocean Beach Boulevard during relatively minor rain events.
- Drainage Basin 9 The City has indicated that ponding regularly occurs along Ocean Beach Boulevard during the wet months.
- 12th Street North Pump Station The pump station has insufficient pumping capacity to handle the predicted flows for the 10-year design. The station can incorporate an additional pump, but currently there are no plans to expand its pumping capacity.

The City identified 4 specific areas where drainage problems exist:

- The high tailwater conditions in the South Main at the point where the Sid Snyder Drive interceptor discharges
- Shortage capacity at the 3rd Street N pump station.
- Ponding along Ocean Beach Boulevard north of Sid Snyder Drive and most noticeably between Side Snyder Drive and Bolstad Avenue.

 Ponding along Washington Avenue in the vicinity of 5th Street S to Sid Snyder Drive.

8.11.b. Capital Improvement Program Plan

The Capital Improvements Program (CIP), as shown in Figure E-51, assumes that new development and redevelopment will not be required to infiltrate or provide detention facilities.

Figure E-51: Capital Improvement Program Alternative 1

PROJECT	YEAR	LOCATION
1	1998/ 2000	11 th St from Oregon Ave to California Ave; pump station at 11 th S; force main to Pacific Ocean; Oregon Ave from 5 th Street S to Sid Snyder Drive
2	1998	Ocean Beach Blvd from Bolstad to 10 th Street N
3	2004	Oregon Ave from 5 th Street N to 4 th Street S; pump station at 3 rd Street N; force main to East Main
4	2006	Oregon Ave from 18 th Street N to Pioneer Road; Pioneer Road to East Main
5	2007	Pump Station at 12 th Street N; force main to Pacific Ocean
6-1	2010	Ocean Beach Blvd from 10 th Street N to 16 th Street N
6-2	2012	Ocean Beach Blvd from 2 nd Street N to 10 th Street N
7	2014	Basin 2 outfall to East Main
8	2016	Washington Avenue from 14 th Street S to 11 th Street S
9	2018	California Avenue from 18 th Street S to Sid Snyder Drive

Source:

8.11.c. CIP ALTERNATIVE 2

The primary difference between the two alternatives is in how runoff from Basins 3 and 4 is handled. In alternative 1, the pump station at 3rd Street North is retained and the runoff from Basin 3 and 4 continues to be discharged to the East Main. In alternative 2, the 3rd Street North pump is eventually abandoned and flows from Basins 3 and 4 are routed to the proposed 11th Street interceptor.

8.11.d. System Improvements

As of winter, 2007, there have been recent upgrades to the system that have solved some of the problems described above:

- At the 3rd Street Stormwater Pump Station, staff installed a 30hp Flygt pump, model 3201, at a rate of 3200 g.p.m. In addition, a 21-inch force main from the station to the ocean was installed.
- At 11th Street S and Ocean Beach Boulevard, the city installed a new Stormwater Pump Station with 2 Flygt pumps. Also, a 21-inch

force main from the station to the ocean was installed that enables capture of stormwater on the south end of town.

- To help drain the water problem on California Avenue, the city installed a 12-inch culvert down 11th Street S from California Avenue to the Stormwater Pump Station.
- The City installed an 18-inch main line along Ocean Beach Boulevard from 11th Street S to 19th Street S.
- To alleviate problems along Washington Avenue, the city installed a 12-inch main line from 2nd Street N to Sid Snyder Drive.

8.11.e. Service Charges

The City of Long Beach formed a stormwater utility in 1993. The utility collects a monthly service charge from existing developed property. The utility collects \$3.75/month per Equivalent Residential Unit (ERU). The number of ERUs in 1995 was 1,389. In addition, the city collects a connection charge of \$190/ERU when property is developed. The Equivalent Residential Unit (ERU) is equal to 3,600 square feet.

Figure E-52: Stormwater Service Fees, Long Beach

	2003	2004	2005	2006
Residential	\$7.80	\$7.80	\$8.03	\$8.27
Commercial per/ERU)	\$7.80	\$7.80	\$8.03	\$8.27

Source: City of Long Beach Ordinance No. 827

8.12 Summary of Issues

Long Beach Capital Facilities are well-positioned to accommodate projected population in the city. The lack of a public community gathering place such as meeting rooms appears to be a priority for stakeholders. There also appears to be interest in concentrating public facilities and services into a Civic Campus. Other cities have found that such "civic" investments go along way to creating a sense of place while enhancing customer service and building civic pride. Several outstanding issues that will have to be addressed are extending sewer service to the northeast corner of the city. This may require unique financing mechanisms such as Local Improvement District for the properties in that area. There is also the challenge of adequately servicing new developments in the northwest Shoreline area with stormwater service. Finally, the water treatment plant must be upgraded or replaced, in order to meet projected water treatment capacity. The city has already begun the process of preparing plans for a new plant.

9. UTILITIES

9.1 Power Supply

The Pacific County Public Utility District No. 2 (P.U.D.), formed in 1936, serves nearly all of Pacific County, with the exception of the Grayland-North Cove-Tokeland area, which is served by the Grays Harbor County P.U.D. on their own lines and on lines leased from the P.U.D., and an area in the east that is served by Lewis County P.U.D. The majority of the power is hydroelectric, purchased from the Bonneville Power Association.

The P.U.D. operates a 12.5 k.V four-wire multi-grounded distribution system, both overhead and underground. The utility is a full requirements purchaser of electricity from the Bonneville Power Administration.

The Pacific County P.U.D. owns and maintains eight substations throughout the county. The substations and their capacities are:

•	Valley Substation	5/6.25 Mva
•	Henkle Street Substation	15/20.1 Mva*

Skidmore Substation 12/16/20 Mva*

Naselle Substation 5 Mva

■ Hagen Substation 10/12.5 Mva

■ Long Beach Substation 12/16/20 Mva*

Ocean Park Substation 15/20/25 Mva

Oysterville Substation 20 Mva

*BPA transformers, P.U.D. delivery @ 12.5 Kv.

Engrossed House Bill 2565 passed the State Legislature in 2000 and instructs retail electricity providers, beginning in 2001, to provide existing and new retail electric customers with a summary of its annual fuel mix information by generation category. According to P.U.D. No. 2, the Fuel Mix Disclosure for the year ended in 2006 is as follows:

•	Biomass	0.13%
•	Coal	2.53%
•	Hydroelectric	84.99%
•	Landfill Gases	0.71%
•	Natural Gas	0.90%
•	Nuclear	10.84%
•	Petroleum	0.03%
•	Waste	0.05%

With over 95 percent of the power generation coming from hydroelectric and nuclear sources, greenhouse gas emissions attributed to power for the area are low. A very small portion of the power comes from non-renewable carbon-based sources.

9.2 Telecommunications

The telecommunications services provided to the City of Long Beach are cable television and telephone services.

CenturyTel provides telephone services to the City and surrounding areas. There are three exchanges on the Long Beach Peninsula (Ocean Park, Long Beach and the Chinook exchanges). The Long Beach exchange (642), which includes the City of Long Beach, the City of Ilwaco and the surrounding areas, has 3,475 hookups with a growth rate of 4.4%. Several wireless communications companies provide cell phone service to Long Beach and the peninsula; currently coverage is spotty in some locations, but the wireless communication companies are all working to expand their coverage.

Cable television service in the City is provided by Charter Cable Company.

Both CenturyTel and Charter Cable provide high-speed internet. Some businesses provide wi-fi access for their customers.

9.3 Solid Waste

The City contracts with Peninsula Sanitation Service to operate a solid waste collection service in the City. The waste is collected and transported to a transfer station on 67th Place east of the City, operated by Pacific Solid Waste Disposal Inc.

Pacific Solid Waste Disposal also operates a recycling system at the transfer station in the City. The company sorts incoming waste for recyclable materials and also offers buy-back service to the public on a limited basis. Materials recovered include glass, aluminum ferrous metal, newspaper, cardboard, computer paper, plastic and automobile batteries.

9.4 Summary of Issues

There are opportunities for the city to reduce its financial outlay by developing standards for reducing waste in its energy consumption (particularly electricity for water and sewage treatment and street and public facility lighting). The city's location on the coast makes it ideal for exploring renewable energy such as wind or wave power. If positioned appropriately, this would become a revenue source for the city. There are also opportunities for savings by separating bio-waste from non-biodegradable waste in its solid waste collection system. Many cities have partnered with private companies to provide citywide wi-fi services as a tourist amenity. Therefore, investing in the city's utilities can actually bolster the city's economy.

F. Pacific County Comprehensive Plan

The following are selected Goals and Polices from the *Pacific County Comprehensive Plan* (1998) regarding Urban Growth Areas.

Goal LU-3: The County's designated Urban Growth Areas should cumulatively provide the area and densities sufficient to permit the urban growth that is projected to occur in the County over the succeeding 20 years.

Policy LU- 3.1: Urban growth areas contiguous to an incorporated city should contain areas characterized by urban growth with minimum densities of four units per acres.

Policy LU-3.2: Urban growth areas should be served by or planned to be served by municipal utilities.

Policy LU-3.3: Urban growth areas should contain vacant land near existing urban areas that is capable of supporting urban development.

Policy LU-3.4: Urban growth areas should be designated so as to be compatible with the use of designated natural resource lands and critical areas.

Policy LU-3.5: Urban growth areas should follow logical boundaries and consider citizen preferences.

Policy LU-3.6: The County should attempt to reach agreement with each incorporated city as designated in this comprehensive plan on the location of an urban growth area boundary.

Policy LU-3.7: Prior expansion of urban growth area containing an incorporated city, it should be shown that the expansion area can and will be served by municipal sewer and water within a time frame accepted by the County, and in a manner that does not degrade surface or ground waters.

Policy LU-3.8: Expansion of an urban growth area boundary should meet one of the following two criteria:

- There is insufficient land within the existing urban growth area to permit the urban growth that is forecast to occur in the succeeding 20 years; or
- An overriding public interest is shown for moving the urban growth area in order to gain a public benefit related to protecting public health, safety and welfare; enabling more effective, efficient provision of sewer or water service; or enabling locally-adopted Comprehensive Plans to more effectively meet the goals of the Washington State Growth Management Act.

Policy LU-3.9: The area that is designated for the expansion of any urban growth area should be contiguous to an existing urban growth boundary.

Policy LU-3.10: Reductions in any urban growth boundary should ensure that sufficient land will remain within the reduced urban growth area to permit the urban growth that is forecast to occur in the succeeding 20 years.

- *Policy LU-3.11*: Expansion or reductions in any urban growth area should take into consideration the presence of natural resource lands and critical areas.
- *Policy LU-3.12*: The designation of or change to urban growth areas should be consistent with the Pacific County-Wide Planning Policies.
- Goal LU-4: A Comprehensive Plan should be maintained for each urban growth area attached to an incorporated city. For urban growth areas around un-incorporated centers and for RAIDs, the policy framework for urban growth should be embodied either in this Comprehensive Plan or in an optional County Sub-Area Plan.
- *Policy LU-4.1*: Compatible level of service standards for public services and facilities should be adopted and maintained among jurisdictions within urban growth areas.
- *Policy LU-4.2*: For each city urban growth area the County and the municipalities should establish common standards for roads and utilities.
- Goal LU-5: The County's designated Urban Growth Areas and RAIDS should concentrate medium and higher-intensity residential, commercial and industrial development in urban growth areas in a way that ensures livability and preservation of environmental quality, open space retention, varied and affordable housing, high quality urban services at the least cost, and orderly transition of land from the County to a city.
- *Policy LU-5.1*: Infilling in areas already characterized by urban growth that have the capacity and provide public services and facilities to serve urban development should be encouraged.
- *Policy LU-5.2*: Urban development and facilities should be phased outward from core areas
- *Policy LU-5.3*: Where urban services and utilities are not yet available in urban growth area, development should be configured so that urban development may eventually infill and become urban.
- *Policy LU-5.4*: Residential development in urban growth areas and overall densities should be high enough to support efficient public services and provide for affordable housing choices. There should be a variety of densities based on land capability, environmental sensitivity, and capacity of public services.
- Policy LU-5.5: Industrial and commercial development of all types may occur in urban growth areas, particularly the larger and more intensive types of development which require higher levels of public services and facilities. Within the urban growth areas around the incorporated cities, the industrial and larger commercial development should take place inside the cities themselves in order to support their roles as the economic centers of their areas.
- *Policy LU-5.7*: Open space lands contributing to the livability of urban growth areas should be preserved, including those providing scenic amenity, community identity, and buffers within and between urban and rural areas.

Policy LU-5.8: A variety of densities and single- and multi-family housing should be provided in urban growth areas.

Goal LU-6: The County should review annexations and incorporations to ensure consistency with this Comprehensive Plan, and to evaluate impacts on County land use, traffic circulation, public services and facilities, and the integrity and continuity of service areas and boundaries.

Policy LU-6.1: Cities and the County shall support annexations and incorporations to ensure consistency with this Comprehensive Plan, and to evaluate impacts on County land use, traffic circulation, public services and facilities, and the integrity and continuity of service areas and boundaries.

Policy LU-6.2: Annexations of unincorporated islands within an urban growth area should be actively encouraged and creation of new unincorporated islands should be discouraged.

Policy LU-6.3: Annexations will not be permitted outside of designated urban growth areas

Policy LU-6.4: Cities may require an annexation commitment as a condition of utility service within designated urban growth areas.

Policy LU-6.5: New city incorporations should provide adequate facilities and services for urban growth consistent with the Comprehensive Plan.

Policy LU-6.6: Cities and the County should jointly develop annexation agreements which define policies, including sharing of revenue of annexation reimbursement for capital projects developed by the County, maintenance of infrastructure, inclusion of roads and streets, and other issues.

G. Green Street Cross Sections	

Figure G-1: 30 Feet Wide Street Section Options



creä affiliates, LLC

30 Feet Wide Streets

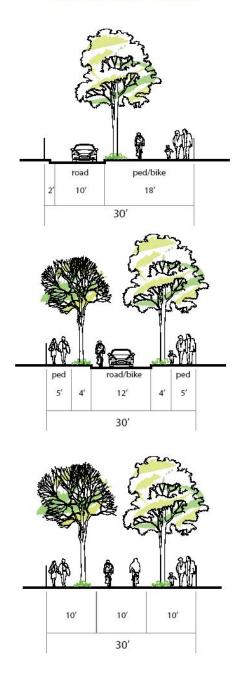
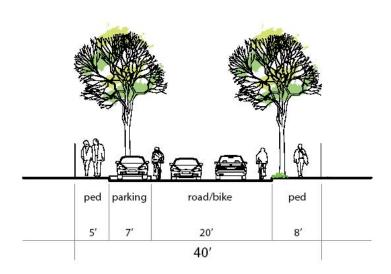


Figure G-2: 40 Feet Wide Street Section Options



creä affiliates, LLC

40 Feet Wide Streets



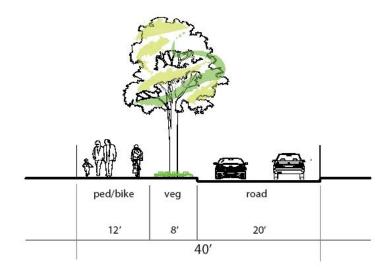


Figure G-3: 50 Feet Wide Street Section Options

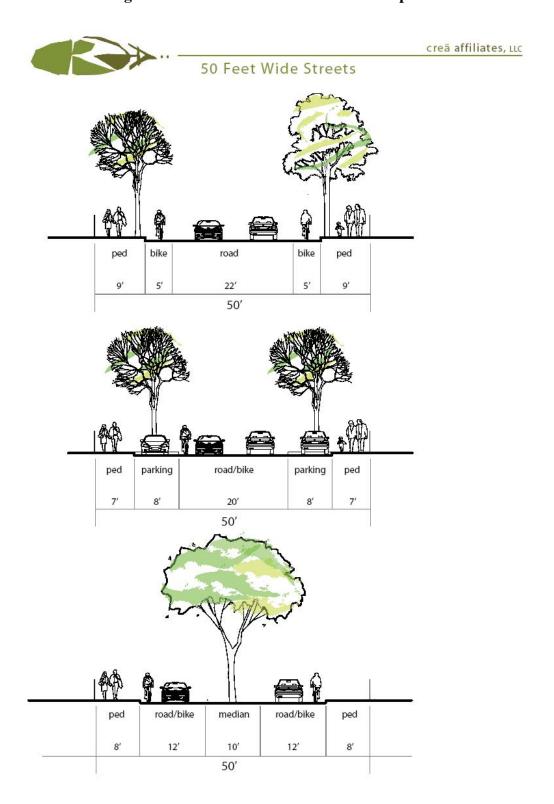


Figure G-4: 50 Feet Wide Green Streets

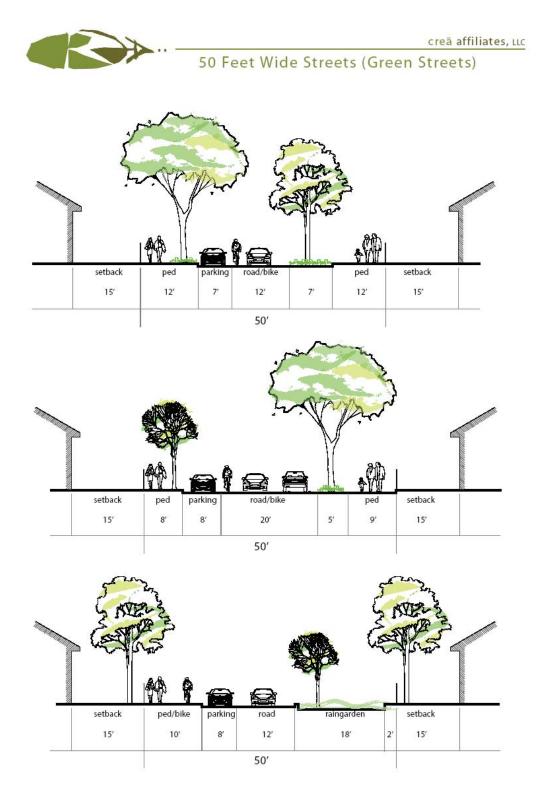
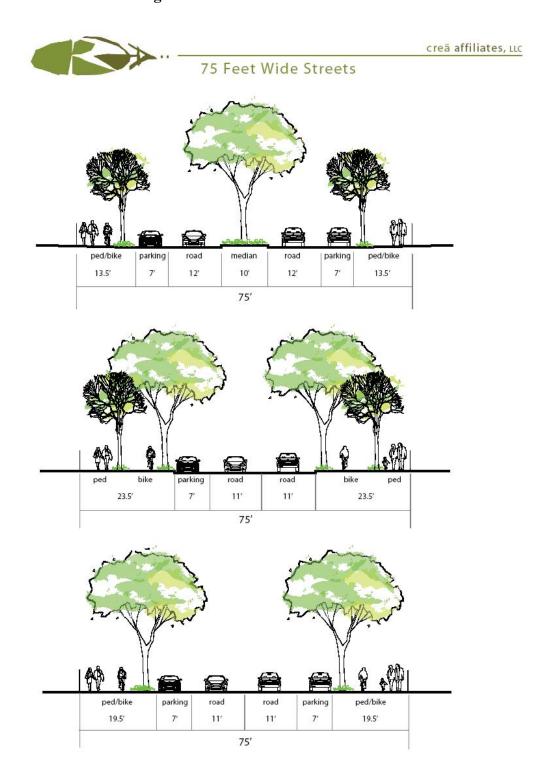


Figure G-5: 75 Feet Wide Green Streets



H. SEPA Review

CITY OF LONG BEACH SEPA NOTICE MITIGATED DETERMINATION OF NON-SIGNIFICANCE

CASE No. SEPA Application 2008-02

Description of Proposal: Adoption of the Long Beach Comprehensive Plan 2026 update

Proponents: City of Long Beach, 115 Bolstad Avenue W, PO Box 310, Long Beach, WA

98631

Location: City of Long Beach, Pacific County, Washington; includes city limits, Urban Growth

Areas and service areas

Lead Agency: City of Long Beach

The lead agency for this proposal has determined that if mitigation measures are completed as provided for in the application, the proposal does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c), provided certain conditions are met. This decision was made after review of a completed environmental checklist and other information on file with the lead agency. Detailed information and copies of the conditions are available to the public on request.

Comment Period: This Mitigated DNS is issued under WAC 197-11-340(2). The lead agency will not act on this proposal for 15 days from the date below. Comments must be submitted to the City of Long Beach by **4:00 p.m. on July 24th, 2008 (EXTENDED TO JULY 31, 2008).**

Responsible Official: Kaye Simonson
Position/Title: Director, Community

Development

Phone: (360) 642-4421 Address: PO Box 310

115 Bolstad West

Long Beach, WA 98631

Date Issued: July 9, 2008/ Published: July 16, 2008

Appeal: You may appeal this determination at Long Beach City Hall, 115 Bolstad West, Long Beach, WA 98631 no later than 10 (ten) days from the date of final MDNS. You should be prepared to make specific factual objections. Contact the Community Development Department to read or ask about the procedures for SEPA appeals.

Note: The issuance of this Mitigated Determination of Nonsignificance DOES NOT constitute project approval. The applicant must comply with all other applicable requirements of the City of Long Beach before receiving any permits.

CITY OF LONG BEACH SEPA ENVIRONMENTAL CHECKLIST

A. BACKGROUND INFORMATION

1. Name of proposed project, if applicable:

Adoption of the Long Beach Comprehensive Plan Update (2026)

2. Name of applicant:

City of Long Beach Community Development Department

3. Address and phone number of applicant and contact person:

City of Long Beach Community Development Department 115 Bolstad Avenue West PO Box 310 Long Beach, WA 98631

Contact: Kaye Simonson (360) 642-4421

4. Date checklist prepared: 6.17.08

5. Agency requesting checklist:

City of Long Beach Community Development Department 115 Bolstad Avenue West PO Box 310 Long Beach, WA 98631

6. Proposed project timing or schedule (including phasing, if applicable):

A public workshop is scheduled for late June 2008. Planning Commission public hearing, review and deliberation, and recommendation in July 2008. Anticipated adoption by the Long Beach City Council in August 2008.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Review and amendments to the Comprehensive Plan are governed by RCW 36.70A.130.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

SEPA Checklist.

9. Do you know of pending applications for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No.

10. List any government approvals or permits that will be needed for your proposals, if known:

Adoption by the Long Beach City Council.

11. Give a complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist which ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

Proposed adoption of Long Beach Comprehensive Plan Update includes recommended zone changes within the City's UGA and new policies related to development in the City. See Draft Plan for a complete description.

12. Location of the proposal. Please give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any. If a proposal should occur over a range of area, please provide the range or boundaries of the site(s). Please provide a legal description, site plan, vicinity map, and topographic map if possible. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (Indicate if maps or plans have been submitted as part of a permit application)

See Draft Plan maps. The City of Long Beach is located in Pacific County on the Long Beach Peninsula.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): flat, rolling, hilly, steep, slopes, mountainous, other(describe).

The City is located on the Long Beach Peninsula. It is built upon the relatively flat sandy coastal dune system with elevation ranging from sea level to approximately 25 feet.

b. What is the steepest slope on the site (approximate % slope)?

The steepest slopes in the city are the primary dunes comprising the beach front. Slopes on these dunes which reach up to 25 feet above mean sea level can reach 10%. However, the primary dunes are not subject to development or proposed for significant land use or zoning changes.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, please specify and note any prime farmland.

Soils under the city are primarily well-sorted and well drained fine grained sand. East of Ocean Beach Boulevard and beyond the City's eastern limits are deposits of Netarts fine sand interspersed with Yaquina loamy fine sand. Yaquina soils are somewhat poorly drained and lie primarily in depression areas east of the city, including areas of mucky and peat soils associated with the wetlands east of the city.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:

Unstable or geologically hazardous soils in the area are limited to the shoreline beach and dunes and are not subject to proposed land use or zoning changes.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Does not apply.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Coastal shoreline erosion and accretion are ongoing natural processes on the beachfront. The city's shoreline area has grown significantly over the past 50-100 years due to accretion and sand deposition from off-shore currents carrying sediments from the Columbia River. However, more recent analysis indicates that shoreline erosion is increasing in some areas of the Long Beach Peninsula. Shoreline clearing and grading regulations are in place to mitigate any localized erosion caused by new shoreline development.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Does not apply.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Existing City of Long Beach codes and standards related to erosion control would remain in effect for any new development authorized by this proposal. The Plan also includes strategies to encourage shoreline use and development consistent with the natural environment. The Plan also requires the city to continue working with the Washington Department of Ecology to monitor the continued research in the Southwest Washington Coastal Erosion Study (SWCES) and coordinate with affected state and federal agencies to ensure adequate seashore protection for Long Beach.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction, and when the project is completed? If any, generally describe and give approximate quantities if known.

If approved, the proposed plan could allow for increased development activities on some parcels thus contributing to increased emissions from automobiles and other land use activities. These are not expected to be significant.

b. Are there any off-site sources of emissions or odor which may affect your proposal? If so, generally describe.

None.

c. What are the proposed measures to reduce or control emissions or other impacts, if any:

Air quality is very high on the Long Beach Peninsula in general owing to prevailing wind patterns and the relatively low level intensity of development. Air emission standards are regulated through the city's development regulations.

- 3. Water
- a. Surface:

1) Is there any surface water on or in the immediate vicinity of the site (including year-round and seasonal stream, saltwater, lakes, ponds, associated wetlands)? If yes, describe type, provide names, and, if known, state what stream or river it flows into.

The city is bounded by the Pacific Ocean on its western border and by a series of interconnected wetlands and small lakes on its eastern boundary that drain to Willapa Bay.

2) Will the project require any work over or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Development within 200 feet of the Pacific Ocean and the wetlands associated with Willapa Bay on the eastern border of the city is regulated under the Shoreline Master Program (SMP) and the Shoreline Management Act. No work within, or adjacent to these resources is directly authorized by adoption of the Comprehensive Plan. Subsequent development over or adjacent to these areas is subject to the requirements of the SMP and other city and state regulations.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Does not apply.

4) Will surface water withdrawals or diversions be required by the proposal? Give general description, purpose, and approximate quantities if known.

The city's drinking water supply is provided by means of two surface water impoundments. No changes to that water supply source are anticipated by adoption of the Comprehensive Plan Update. The Plan does indicate that additional pumping capacity and additional water rights will be needed to serve projected population growth and demand by 2015 throughout the larger city – served water service area. Those improvements are targeted in the City's 6-year Capital Improvements program and water system plan.

5) Does the proposal lie with a 100-year flood plain? Note location on the site plan, if any.

The city's floodplain is limited to the primary dune system along the shoreline of the Pacific Ocean. Flood events in the city are related to winter storm events with a combination of high tides, winds and high groundwater table. Localized flooding is primarily limited to the coastal dune complex, forested wetlands and adjacent areas.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground:

1) Will ground water be withdrawn or recharged? Give general description, purpose, and approximate quantities if known.

No withdrawal or recharge of groundwater will be directly undertaken as part of this proposal.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals . . .; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No wastes will be directly discharged into the ground as a result of adoption of this proposal.

- c. Water runoff (including storm water):
 - 1) Describe the source of runoff and storm water and method of collection and disposal, if any (including quantities, if known). Where will this water flow? Will this water flow into other waters? If so, please describe.

The City is currently in the process of developing a Stormwater Management Plan to address comprehensive stormwater runoff and management issues citywide.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Does not apply.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Existing City codes and standards related to stormwater management would remain in effect for any new development authorized by this proposal.

4. Plants

a. Check or circle types of vegetation found on the site:

- _X_ deciduous tree: alder, maple, aspen, other
- _X_ evergreen tree: fir, cedar, pine, other
- X shrubs
- _X_ grass
- _X_ pasture
- __ crop or grain
- _X_ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- _X_ water plants: water lily, eelgrass, milfoil, other
- _X_ other types of vegetation.

b. What kind and amount of vegetation will be removed or altered?

No vegetation removal will occur directly as a result of adoption of this proposal.

c. List threatened or endangered species known to be on or near the site.

There are no designated priority, threatened or endangered species habitat within the city according to the Washington Department of Fish and Wildlife.

d. List proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Landscaping standards for new development authorized under the Comprehensive Plan are included in the City's development regulations.

5. Animals

a. Circle any birds and animals which have been observed on or known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other

mammals: deer, elk, beaver, other fish: bass, salmon, trout, shellfish, other

b. List any threatened or endangered species known to be on or near the site:

There are no designated priority, threatened or endangered species habitat within the city according to the Washington Department of Fish and Wildlife.

c. Is the site part of a migration route? If so, explain.

The Long Beach Peninsula is within a migration route for waterfowl, shorebirds, songbirds and other migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any:

The Plan proposes increased protections for the coastal dune complex and forested wetlands on the city's eastern boundary that provide the most significant wildlife habitat areas within the city. The City is also in the process of developing an updated Critical Areas Ordinance (CAO) to identify and protect important fish and wildlife habitat conservation areas consistent with best available science.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's needs? Describe whether it will be used for heating, manufacturing, etc.

Energy is provided to the city by the Pacific County P.U.D. The PUD generates over 95% of its energy supply from hydroelectric and nuclear power sources. Greenhouse gas emissions attributed to the power supply for the area are very low. A very small portion of the power supply comes from non-renewable carbon-based sources. Additional opportunities for wind and wave generated power sources are identified in the Plan.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal?

Energy conservation and sustainable design features have been incorporated into the Comprehensive Plan Update. The Plan focuses on increasing densities in the city's linear core area, increasing use of small-scale transit facilities, new walking and pedestrian trails and pathways linking the residential, commercial and shoreline recreational areas, bicycle routes and increased mixed use zoning to reduce automobile dependency. The Plan also calls for "green building" incentives and solid waste minimization through onsite composting incentives and a new city recycling program.

d. What are the proposed measures to reduce or control energy impacts, if any?

See above.

7. Environmental Health

a. Are there any environmental health hazards, exposure to toxic chemicals, including risk of fire and explosion, spill, or hazardous waste, that occur as a a result of this proposal? If so, describe.

None known.

b. Describe special emergency services that might be required.

The City has adequate fire, police and emergency medical services to respond to anticipated emergencies in addition to mutual aid agreements with adjacent emergency service providers.

c. What are the proposed measures to reduce or control environmental health hazards, if any?

City regulations apply to noxious emissions and other environmental health hazards from regulated land use activities.

- 8. Land and Shoreline Use
- a. What is the current use of the site and adjacent properties?

The City of Long Beach comprises approximately 1,174 acres and a permanent resident population of 1,460. The City is home to a range of land uses, including single-family and multi-family residential, condominiums, retail commercial, motels, commercial recreational activities, public and institutional uses and limited light industrial uses.

b. Has the site been used for agricultural purposes? If so, describe.

No.

c. Describe any structures on the site.

See the Comprehensive Plan for a discussion of land use activities and buildings.

d. Will any structures be demolished? If so, what.

No.

e. What is the current zoning classification of the site?

See the Comprehensive Plan for the existing land use and zoning maps of the City.

f. What is the current comprehensive plan designation of the site?

See the Comprehensive Plan for the existing land use and zoning maps of the City.

g. If applicable, what is the current shoreline master program environment designation of the site?

See the Comprehensive Plan for the existing shoreline master program map designations for the City.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

See the Comprehensive Plan for the existing critical area designations map for the City.

i. What are proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed Comprehensive Plan Update includes a future land use map as well as goals, policies, strategies and implementing capital facility plans and programs consistent with the GMA and Pacific County Countywide Planning Policies. See the Comprehensive Plan for more details.

j. Approximately how many people would reside or work in the completed project?

The City's current resident population is approximately 1,460. The Comprehensive Plan projects a 20 year population growth of between 700-900 persons in the city resulting in a projected 2025 population of between 2,160-2,360 residents.

k. Approximately how many people would the completed project displace?

None.

l. What are proposed measures to avoid or reduce displacement or other impacts, if any?

See Plan policies and strategies aimed at achieving sustainable development characteristics in the Land Use, Housing and Environment chapters.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The Plan projects a demand for between 640 to 820 new housing units over the next twenty years. Up to one-third of those units are likely to be held as seasonal units, either owner or renter-occupied. All ranges of housing values can be accommodated under the Plan. Middle and higher income single and multi-family housing opportunities exist between downtown and the shoreline. The Plan proposes zoning changes to encourage affordable mixed use commercial/multi-family residential redevelopment opportunities along the city's major commercial thoroughfare. East of the downtown commercial core are more established middle income single family neighborhoods.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Does not apply.

c. What are proposed measures to reduce or control housing impacts, if any?

The Plan and the city's development regulations call for increased trail connections between the eastern and western neighborhoods in the city to encourage pedestrian and bicycle travel and to lessen vehicle trips between and within these neighborhoods and the commercial core.

In addition, the city's development regulations and standards fully regulate new housing development, including provisions for clearing and grading, stormwater management, erosion control and other site development standards such as appropriate lot sizes, building setbacks and height limits.

Additional affordable housing impact strategies include:

- Support a variety of housing types by adopting development standards and designating areas for single-family, medium-density and high-density residential development.
- Prepare an ordinance to allow accessory dwelling units within certain zone districts.
- Encourage a variety of housing types such as row houses, townhouses and small-lot cottages in medium- and high-density zone districts.
- Work cooperatively with the Joint Pacific County Housing Authority to provide emergency, short-term and supportive housing solutions and affordable housing.
- Consider developing or supporting programs that will assist in housing rehabilitation, including but not limited to providing low-interest revolving loans for home improvements.

- Conduct a housing condition survey and a "Housing Needs Assessment" and develop a strategy for providing housing to low-income, homeless, seniors, special needs and other populations.
- Establish or support Self-Help Paint and Fix-Up programs.
- Work in partnership with the Joint Pacific County Housing Authority and other agencies and non-profit organizations to construct affordable housing.
- Consider incentives for developing a variety of affordable housing types for low to moderate-income households, such as density bonuses or modification of development standards.
- Encourage new developments that are above a certain size to include housing for employees.
- Encourage the creation of worker housing by allowing residential uses above commercial development or by permitting additional density in certain areas.

10. Noise

a. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Does not apply.

b. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)?

No significant increase in noise levels normally experienced in the city today would be expected as a result of adoption of the Comprehensive Plan Update.

c. What are the proposed measures to reduce or control noise impacts, if any?

The Plan has a policy in place to maintain a noise ordinance that regulates noise levels in both residential as well as commercial areas and recommends monitoring of noise levels should it be necessary. Land uses and activities that may generate excessive noise levels are regulated under the city's noise ordinance performance standards.

11. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

Building height limits are enforced through the city's development regulations. No significant maximum allowable height changes to those regulations are proposed in the Plan. Most commercial, motel and other multi-family residential buildings in the city are relatively low rise and (due to the flat topography) do not impact views of the shoreline itself.

c. What are the proposed measures to reduce or control aesthetic impacts, if any?

Urban design standards are already in place for the city to encourage compatible building styles, landscaping, pedestrian safety and separation from vehicle traffic, as well as enhanced parking, signage and lighting regulations for new development. The Urban Form Element of the Plan also recommends additional standards and mechanisms to enhance and protect the appearance of the city and its UGA.

12. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Does not apply.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Does not apply.

c. What existing off-site sources of light or glare may affect your proposal?

Does not apply.

d. What are the proposed measures to reduce or control light and glare impacts, if any:

The Plan includes policies and strategies, through the design review process, to control light and glare from new development.

13. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The Pacific Ocean and its associated coastal dune complex comprise the entire western border of the city. Recreational opportunities include beachcombing, beach driving (in selected areas), bicycling, fishing, shellfish harvesting, bird watching, kite flying and other recreational activities associated with saltwater shorelines. On the City's eastern edge, the Plan proposes improved linkages to Tinker Lake and the interior wetlands to encourage additional canoeing, kayaking, hiking, fishing and bird watching opportunities.

b. Would the proposed project displace any existing recreational uses? If so, describe.

None anticipated.

c. What are the proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any?

The Plan proposes improved public access to and habitat management of the coastal dune complex, including extension of the Discovery Trail along the Pacific Ocean. The Plan also highlights opportunities for additional neighborhood and pocket parks within the city's residential neighborhoods, creation of a "Green Streets Program" to beautify and link recreational opportunities throughout the city with its residential neighborhoods and commercial core and improved way finding and signage to highlight recreational opportunities citywide. On the City's eastern edge, the Plan proposes improved pedestrian and bicycle trail linkages to Tinker Lake and the interior wetlands to encourage additional canoeing, kayaking, hiking, fishing and bird watching opportunities consistent with the Plan's economic development goal of encouraging eco-tourism.

14. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None known.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on the site.

The Discovery Trail parallels the Pacific Ocean shoreline through the coastal dune complex and traverses an area once travelled by Lewis and Clark and the Corps of Discovery during their winter stay at Fort Clatsop in 1804-05. Although there are no known buildings or other historic sites within the city itself. See the Plan for a more detailed description of the city's historic development.

c. What are the proposed measures to reduce or control impacts, if any?

The Plan includes policies recommending development of a Cultural Heritage Plan for the city and the Long Beach Peninsula to encourage additional tourism to include such topics as first peoples history, the age of Northwest Coast exploration, railroads on the peninsula, development of the cranberry industry, city history and importance of the area's natural resources, including fishing, clamming and logging.

15. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The Long Beach street network is primarily a grid of north-south and east-west streets; however, like the city's corporate limits, the city street grid is long and narrow on a north-south axis parallel to the shoreline. (The City of Long Beach and Long Beach Peninsula road networks are shown in the Plan Appendix) The only through-street that traverses the entire length of the city is State Route (SR) 103 (Pacific Avenue), which serves not only as the city street network's "spine," but also provides connections to the county and state highway systems via SR 101 south of town and to the north end of the Long Beach Peninsula. Continuous access between SR 101 and the north end of the Peninsula also is provided by Sandridge Road, which is located east of the city along the eastern shore of the Peninsula.

Other narrow, largely residential streets provide north-south connections through portions of the city. These include, in particular, Ocean Beach Boulevard one block west of SR 103, and Washington Avenue one to two blocks east of SR 103. Most east-west streets in the city are short, extending two to three blocks east and west of SR 103. Aside from the continuation of the street grid south into Seaview, access to the county road system outside the city is available in only three locations: Pioneer Road (21st Street N) and Sid Snyder Drive (10th Street S) both link directly to Sandridge Road, and 2nd Street N connects to Sid Snyder Drive via V Street east of town.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Public transportation service in Long Beach is provided by the Pacific Transit System, which operates both fixed-route and "demand-responsive" ("dial-a-ride") services in Pacific County and the city of Long Beach. Pacific Transit's Route 20 operates on SR 103 through Long Beach, making 14 runs (each direction) between 5:30 a.m. and 6:30 p.m. on weekdays, and five runs between 10:00 a.m. and 5:30 p.m. on Saturdays.

Pacific Transit System bus routes link Long Beach to Astoria, Oregon, to the south, to the cities of South Bend and Raymond in northern Pacific County, and to Aberdeen in Grays Harbor County to the north. No passenger rail or other intercity bus service is provided

directly to Long Beach. Amtrak passenger rail service can be accessed in Vancouver, Longview, and Centralia, and Greyhound bus service can be accessed in Vancouver, Kelso, and Centralia.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Does not apply.

d. Will the proposal require any new roads or streets, or improvements to any existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

The Plan identifies several transportation system improvements, including:

The **Pedestrian/Bicycle Loop** would provide a paved pathway for pedestrians and bicycles on a loop following the alignments of Ocean Beach Boulevard on the west, 17th Street S on the south, Idaho Avenue and Washington Avenue on the east, and 24th Street N on the north. The pathway would serve both directions of travel, and could be designed as a separated two-way pathway or as dual-use sidewalks/pathways adjacent to the street.

The **Downtown Access/Circulation Improvements** comprise the following elements:

- Develop street and traffic control improvements to relieve traffic congestion at the Pacific Avenue and Bolstad Avenue intersection.
- Encourage through-traffic to use alternate routes other than Pacific Avenue.
- Develop street and traffic control improvements that reduce conflict between pedestrians, moving vehicular traffic and parking along Pacific Avenue in the downtown core (i.e., between 11th Street S and 2nd Street N).
- Realign the intersection of Bolstad Avenue and Ocean Beach Boulevard.
- Maximize back-lot parking and on-street parking on Oregon Avenue.

The **Pacific Avenue Pedestrian Crossings** would provide marked pedestrian crosswalks at regular intervals along the entire north-south length of Pacific Avenue through the community. It is proposed that these crossing improvements be made at sufficient intersections to facilitate safe pedestrian use at a minimum. In addition, improved crossings should be available at all bus stops.

Provide a new **Beach Access Road** at 14th Street N. to serve the north side of Long Beach and supplement the existing beach accesses at Bolstad Avenue and Sid Snyder Drive. Improved pedestrian and bike trail connectors at other locations, such as Pioneer Road, should also be considered.

In coordination with Washington State Department of Transportation (WSDOT), prepare an **Access Management Plan for Pacific Avenue** that recognizes and balances the

sometimes conflicting needs of property access, smooth traffic flow, and pedestrian and bicycle safety by identifying the appropriate location and size of driveways and side street intersections accessing Pacific Avenue.

Construct the remaining segments of **Shoreview Drive** as a local access street in the existing rights-of-way.

e. Will the project use or occur in the immediate vicinity of water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The 1999 Pacific County Long Beach Peninsula Transportation Study (LBPTS) used for the Plan Update included a thorough technical analysis of the Long Beach street system. That analysis contained a complete set of intersection traffic counts, operational analyses, and 2020 traffic forecasts and analyses for "typical" conditions and for peak (summer weekend) conditions. The 1998 and 2020 peak traffic volumes on the city arterial system are compiled in the Plan Appendix. Summer peak traffic volumes are expected to increase by as much as 40%-45%; this translates to a modest average growth rate of approximately 2% per year.

g. What are proposed measures to reduce or control transportation impacts, if any?

The Plan includes policies encouraging preparation of a **parking management plan** that defines how short-term and long-term parking for downtown visitors, employee, deliveries, and bicycles should be managed, where on-street and off-street parking should be located, and where bicycle parking facilities are needed. The purpose of the Downtown Parking Management Plan is to define and implement efficient and effective means of providing and managing downtown parking.

The Plan includes policies recommending provision of **special transportation services** for peak season and special events. Special services may include the provision of temporary remote parking lots, shuttle services, and local circulation transit service. The purpose of the special services is to better manage traffic, and to provide a convenient alternative to automobile use, during periods of heavy traffic volumes and congestion.

The Plan includes policies encouraging the City to develop code requirements that facilitate the use of **alternative transportation modes**, such as public transit, private transit (e.g., low-speed vehicles, jitneys, carriages), walking, and bicycling. Such actions could include the provision of parking, loading/unloading and other facilities for transit operations, the provision of special events traffic controls and parking, shuttle and trolley service, and requirements for sidewalk and bike path construction.

The Plan includes policies encouraging the City to develop **pedestrian street/highway crossing improvements** at all bus stops and bus shelters as appropriate.

The **Green Streets Program** would provide good east-west pedestrian and bicycle linkages at regular intervals along the entire north-south length of the city. (Green Streets are also addressed in the Parks, Open Space and Recreation Element. See Plan Appendix G for sample green street cross sections.) Like the Pedestrian/Bicycle Loop, the purpose of the Green Streets (in transportation terms) is to facilitate safe, convenient pedestrian and bicycle movement throughout town for residents and visitors.

16. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The Long Beach Volunteer Fire Department provides fire protection to the entire city. The City has an interlocal agreement with the City of Ilwaco and Pacific County Fire District No. 2 (Chinook) for an automatic response to Ilwaco for any confirmed structure fire. The City has a mutual aid agreement with Pacific County Fire District No. 1 for EMS and fire response. The City is currently in the process of adding 4 bays in a building adjacent to the existing fire station. In spring 2007, the City placed into service a 95-foot ladder truck. There are no further plans on adding or replacing old fire engines.

There are several accredited law enforcement agencies that serve the City of Long Beach and its surrounding areas. All these bodies work closely together. The Long Beach Police Department provides police protection to the entire city population, as well as the City of Ilwaco. Facilities, equipment and staff include a Police Station, eight police cars, one 4WD, six full-time police officers (including a police chief), one administrative assistant, and two additional part-time foot patrol officers in the summer. Additional police protection services are provided by the Washington State Patrol, Pacific County Sheriff's Department, State Park Rangers and the US Coast Guard. Adoption of the Plan Update itself is not expected to generate significant additional need for police protection.

The City has an elementary school (grades 1-6). The school is located at 400 Washington Avenue S. As of January, 2007, there were 245 students and 45 employees. The building has recently been remodeled and an early learning center is being constructed. There are no other expansion plans. The building has a gymnasium that is used for assemblies, a cafeteria and kitchen, library and handicapped facilities. The City is served by a transportation system (bus) operated by Ocean Beach School District 101. The middle and high schools that serve the city are in Ocean Beach District 101, and are located in the City of Ilwaco. The school capacity is 1,007 Head Count and 966 FTE. As of January, 2007, a new building is under construction. There are no further expansion plans, and the

disposition of the existing building, which will only be partially used, has not been determined.

The City is served by the Ocean Beach Hospital located in the City of Ilwaco. This is a Level IV Trauma Center, providing Emergency and Diagnostic Services. Over 7,000 patients are treated every year. There are no medical clinics in Long Beach; clinics are located in Ilwaco and Klipsan Beach. Medix, a private for-profit ambulance service, began serving Long Beach, Chinook and Ilwaco in 2007. Pacific County Fire District 1, with stations in Ocean Park and Seaview, provides ambulance service to the rest of the Peninsula. Long Beach, Ilwaco and Chinook have entered into an agreement with Fire District 1 for the provision of ambulance service should Medix not be available. Currently, Long Beach Fire Department can provide basic life support and has one ambulance.

b. What are proposed measures to reduce or control direct impacts on public services, if any?

The Plan Update includes several policies aimed at maintaining adequate public services:

- Pursue innovative approaches to financing public facilities and services.
- Concentrate public services into a Civic Campus.
- Pursue construction of a Community Center to house public and community functions and amenities. The design should be both flexible and expandable for the future.
- Look for innovative strategies for visitor parking to reduce the use of land area for parking and expand the developable property in the downtown area.
- Support schools, parks, libraries, and similar facilities to strengthen Long Beach's standing as a family-oriented community.
- Prioritize new facilities according to the projected density and location of new development.
- Form partnerships with other jurisdictions, agencies and organizations to maximize assets and return on investment for local facilities.
- Develop policies and programs that will encourage developers to include community facilities and amenities in projects.

17. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other(describe).

All of these utilities are available within either all or portions of the city and its adjacent unincorporated UGA.

b. Describe the utilities which are proposed for the project, the utility providing the service, and the general construction activities of the site or in the immediate vicinity which might be needed.

The Plan includes analysis and planned improvements for the City's water, stormwater and sanitary sewer systems. See the Plan Appendix for a complete description of planned utility improvements.

C. SIGNATURE

The above answers are true to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Mark Personius, AICP, Growth Management Consultant

Date Submitted: <u>6-18-2008</u>

D. SUPPLEMENT SHEET FOR NONPROJECT ACTIONS

(DO NOT USE THIS SHEET FOR PROJECT ACTIONS)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would effect the item at a greater intensity or at a rate then if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production or noise?

The proposal could increase the amount of total development allowed in the city, which, in turn could lead to increased demand for potable water, stormwater and wastewater discharges, air emissions from increased vehicular trips and associated noise from increased residential and commercial development. However, the Plan anticipates improvements to water supply and distribution, stormwater and wastewater treatment capabilities commensurate with the level of planned growth authorized under the Plan. The city's development regulations also contain sufficient standards to ensure that those increased impacts are sufficiently mitigated to a non-significant level. To address some of the projected increase in non-resident traffic, the plan recommends greater use of transit to reduce the

number of local trips and therefore, reduce both the emissions from car trips, but also retain the porosity of city surfaces from reduced surface parking standards and requirements.

2. How would the proposal be likely to affect plants, animals, fish or marine life?

The potential for higher development densities and intensities of use in some portions of the city could adversely affect some existing fish and wildlife habitat. However, the Plan includes policies and strategies aimed at concentrating that development in limited areas and not expanding the city's UGA to any significant extent beyond those areas already planned for future urban growth. All new development would be regulated by the City's implementing regulations and CAO which recommend sufficient buffers and standards to ensure adequate protection of environmentally sensitive areas, including wetland protection and fish and wildlife habitat protection standards found in the Critical Areas Ordinance.

Proposed measures to protect or conserve plants, animals, fish or marine life?

The City is preparing an updated CAO based on best available science which establishes adequate buffers, setbacks and standards to protect plants, animals and marine life. Maintaining full compliance with the Critical Areas Ordinance and other development regulations should mitigate the impacts of new development on environmentally sensitive areas in the city (e.g., clearing and grading, stormwater runoff and erosion control). The Plan also recommends strategies to enhance management of the fragile conservancy zones in the coastal dune complex, including preparation of habitat management plans, to ensure the long term maintenance of those areas for fish and wildlife habitat

3. How would the proposal be likely to deplete energy or natural resources?

The proposal could lead to slightly increased energy consumption and demand for new residential and commercial development in the city. Increased development potential in the city, however, is limited to existing partially developed or under developed areas rather than an extension of new development into previously undeveloped areas. Proposed growth authorized under the Plan remains within the capacity of the existing and programmed energy supply for the area. No GMA-designated resource lands are subject to UGA conversion under the Plan.

Proposed measures to protect or conserve energy and natural resources are:

The Plan is founded on the principle of sustainability in recognition of the vibrant yet vulnerable natural habitat that shapes the Long Beach Peninsula and complements the economic development goal of eco-tourism. The Plan emphasizes working with and not disturbing the rich natural environment surrounding the city, such that the natural environment remains the mainstay and the underpinning of the city's economic strategy to pursue eco-tourism. It seeks to accomplish this goal by:

• Concentrating development within the existing city footprint

- Locating jobs and housing opportunities in close proximity to one another
- Encourage new non-motorized travel and transit opportunities to reduce travel and energy demand
- Adopt full cost accounting practices to consider a wider range of community, fiscal and environmental impacts when planning infrastructure improvements
- Adopt a green streets program to encourage pedestrian activity and new native vegetation and tree plantings to provide aesthetic improvements as well as better stormwater management
- Adopt new design standards aimed at reducing energy usage in new construction
- Adopt a vision of urban form for the city that ties together the needs of both the natural and the built environment

4.How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farm lands?

New development allowed the Plan could adversely affect existing environmentally sensitive areas by generation of new impervious surfaces such as homes and roads or by encroaching on areas currently in a natural state and contributing adverse impacts to the functions and values of those areas such as increased erosion and stormwater runoff.

Proposed measures to protect such resources or to avoid or reduce impacts are:

The proposal would increase protection of environmentally sensitive areas by adopting a new Critical Areas Ordinance (CAO) based on best available science, by proposing to expand protection and management of the coastal dune complex and the forested wetlands along the city's eastern edge, improving the city's stormwater management capabilities and increase the number and type of park and recreational opportunities in the city. Increased development potential proposed in some areas of the city are located in neighborhoods not significantly impacted by environmentally sensitive areas. No changes to existing GMA-designated resource lands such as prime farm lands or forest lands are proposed as part of this Plan.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The proposed Long Beach Comprehensive Plan Update would increase the development capacity of certain neighborhoods within the city. In total, planned residential growth could increase by between 640 and 820 dwelling units over the next twenty years. Most of that new development would be accommodated by means of higher density residential and mixed use development within the existing city footprint and existing planned unincorporated UGA.

The City's existing unincorporated UGA (see Planning Area #1, Figure C-2, pg. C-23 of the Plan) immediately north of the existing city limits remains unchanged by this proposal. The

Plan includes a small sliver of UGA expansion along the eastern edge of the city (see Planning Area #2, Figure C-2, pg. C-23 of the Plan). This expansion is only to straighten out the existing eastern city boundary and includes several adjacent small parcels served by the city but currently unincorporated. This UGA expansion also provides city access to Tinker Lake and its associated wetlands which are integral to the City's plans for expanding tourism and recreational opportunities along its eastern edge (see the Parks, Open Space and Recreation Element of the Plan). No significant new urban development potential is otherwise created by this limited UGA expansion.

The proposed land use re-designations in the Plan are not inconsistent with current adopted shoreline master program (SMP) use designations for the city shorelines. However, there are some inconsistencies between the existing city zoning and SMP shoreline use designations. The city has been strongly encouraged by the Washington Department of Ecology to correct those inconsistencies when the City undertakes its mandated comprehensive SMP Update in 2014 based on the new SMP guidelines. The City may still pursue some "limited" SMP amendments to correct existing inconsistencies or historic map errors to the shoreline use designations and supporting policies, but such amendments, if proposed by the city would be prepared as a separate land use action and not under the same action as adoption of the Comprehensive Plan Update.

No changes to existing shoreline master program designations are proposed as part of this Plan. Nor are the land use designation changes sought in this Plan likely to subsequently affect or be inconsistent with existing shoreline use designations in the city.

Proposed measures to avoid or reduce shoreline and land use impacts are:

The Plan includes a wide range of strategies to reduce shoreline and land use impacts, including but not limited to:

- Facilitate the location of residential areas within walking or biking distance of commercial areas that offer daily consumables and other services.
- Encourage a variety of residential building types such as mixed-use, row houses, town homes, mobile homes, live-work villages, etc.
- Locate denser residential areas closer to commercially zoned areas.
- Work with residents and property owners to define neighborhood boundaries, entrances and trails through a neighborhood planning program.
- Integrate development of large scale projects with the architecture of our small seaside community to support and reinforce this traditional hometown architecture.
- Locate commercial businesses within walking/biking distance of Pacific Avenue, Pioneer Road or Sid Snyder Drive.
- Provide incentives for building facades to be set back from the street edge in order to create well-designed street level outdoor spaces and café concept spaces that enhance the pedestrian environment and add to the commercial viability of the commercial areas.
- Where feasible, encourage commercial properties to provide parking on site, preferably towards the rear or side of properties.

- Encourage the design of resorts and visitor amenities that promote eco-tourism and integrate the natural beauty of the area into the site design and architecture.
- Require annexed areas to connect to City water and sewer services. For areas that are already developed prior to annexation, local improvement districts (LID) may need to be formed to finance the necessary infrastructure.
- Encourage clustering of buildings in the shoreline zones to protect natural areas, without compromising the overall density assigned to the property.
- Allow public access to the shoreline dune complex and associated wetlands for scientific, educational, and recreational use, provided the public access trails are carefully sited; sensitive habitats and species are protected; and hydrologic integrity of the system is maintained.
- When appropriate develop habitat management plans to protect and enhance the
 ecological functions of the shoreline dune complex with particular emphasis on the
 publicly-owned dune areas in the shoreline conservancy zones and management of
 shore pines.
- Monitor the continued research in the Southwest Washington Coastal Erosion Study (SWCES) and coordinate with affected state and federal agencies to ensure adequate seashore protection for Long Beach.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The 1999 Pacific County Long Beach Peninsula Transportation Study (LBPTS) used for the Plan Update included a thorough technical analysis of the Long Beach street system. That analysis contained a complete set of intersection traffic counts, operational analyses, and 2020 traffic forecasts and analyses for "typical" conditions and for peak (summer weekend) conditions. The 1998 and 2020 peak traffic volumes on the city arterial system are compiled in the Plan Appendix. Summer peak traffic volumes are expected to increase by as much as 40%-45%; this translates to a modest average growth rate of approximately 2% per year.

Proposed measures to reduce or respond to such demand(s) are:

The Plan identifies several transportation system improvements, including:

The **Pedestrian/Bicycle Loop** would provide a paved pathway for pedestrians and bicycles on a loop following the alignments of Ocean Beach Boulevard on the west, 17th Street S on the south, Idaho Avenue and Washington Avenue on the east, and 24th Street N on the north. The pathway would serve both directions of travel, and could be designed as a separated two-way pathway or as dual-use sidewalks/pathways adjacent to the street.

The **Downtown Access/Circulation Improvements** comprise the following elements:

- Develop street and traffic control improvements to relieve traffic congestion at the Pacific Avenue and Bolstad Avenue intersection.
- Encourage through-traffic to use alternate routes other than Pacific Avenue.
- Develop street and traffic control improvements that reduce conflict between pedestrians, moving vehicular traffic and parking along Pacific Avenue in the downtown core (i.e., between 11th Street S and 2nd Street N).
- Realign the intersection of Bolstad Avenue and Ocean Beach Boulevard.
- Maximize back-lot parking and on-street parking on Oregon Avenue.

The **Pacific Avenue Pedestrian Crossings** would provide marked pedestrian crosswalks at regular intervals along the entire north-south length of Pacific Avenue through the community. It is proposed that these crossing improvements be made at sufficient intersections to facilitate safe pedestrian use at a minimum. In addition, improved crossings should be available at all bus stops.

Provide a new **Beach Access Road** at 14th Street N. to serve the north side of Long Beach and supplement the existing beach accesses at Bolstad Avenue and Sid Snyder Drive. Improved pedestrian and bike trail connectors at other locations, such as Pioneer Road, should also be considered.

In coordination with Washington State Department of Transportation (WSDOT), prepare an **Access Management Plan for Pacific Avenue** that recognizes and balances the sometimes conflicting needs of property access, smooth traffic flow, and pedestrian and bicycle safety by identifying the appropriate location and size of driveways and side street intersections accessing Pacific Avenue.

Construct the remaining segments of **Shoreview Drive** as a local access street in the existing rights-of-way.

The Plan includes policies encouraging preparation of a **parking management plan** that defines how short-term and long-term parking for downtown visitors, employee, deliveries, and bicycles should be managed, where on-street and off-street parking should be located, and where bicycle parking facilities are needed. The purpose of the Downtown Parking Management Plan is to define and implement efficient and effective means of providing and managing downtown parking.

The Plan includes policies recommending provision of **special transportation services** for peak season and special events. Special services may include the provision of temporary remote parking lots, shuttle services, and local circulation transit service. The purpose of the special services is to better manage traffic, and to provide a convenient alternative to automobile use, during periods of heavy traffic volumes and congestion.

The Plan includes policies encouraging the City to develop code requirements that facilitate the use of **alternative transportation modes**, such as public transit, private transit (e.g., low-speed vehicles, jitneys, carriages), walking, and bicycling. Such

actions could include the provision of parking, loading/unloading and other facilities for transit operations, the provision of special events traffic controls and parking, shuttle and trolley service, and requirements for sidewalk and bike path construction.

The Plan includes policies encouraging the City to develop **pedestrian street/highway crossing improvements** at all bus stops and bus shelters as appropriate.

The **Green Streets Program** would provide good east-west pedestrian and bicycle linkages at regular intervals along the entire north-south length of the city. (Green Streets are also addressed in the Parks, Open Space and Recreation Element. See Plan Appendix G for sample green street cross sections.) Like the Pedestrian/Bicycle Loop, the purpose of the Green Streets (in transportation terms) is to facilitate safe, convenient pedestrian and bicycle movement throughout town for residents and visitors.

7. Identify, if possible, whether the proposal may conflict with local, state or federal laws or requirements for the protection of the environment.

None known.

I.Implementation Strategies

On July 28, 2007 Long Beach Elected Officials, Planning Commission and Comprehensive Plan Steering Committee members gathered with Staff and CREÄ members at the Fort Columbia Theater. The purpose of the day-long retreat was to develop a draft implementation strategy that would first prioritize the strategies identified in the Comprehensive Plan, and later identify the best revenue sources to carry the recommendations to fruition. The intent is to provide a matrix to help guide the city in implementation of the plan and in future planning and budgeting efforts.

After a brief discussion about the purpose, format and organization of the retreat, the participants were grouped to address 2-3 Comprehensive Plan Elements each. They categorized the strategies that were listed in the Comprehensive Plan into 3 groups: Short-Term; Medium-Term and Long-Term strategies. Some strategies were not included in any of the categories and were not discussed any further that day. However, that was not to be taken as an indicator that those strategies were not still considered necessary to the Plan. Indeed, many of those strategies were not identified as priorities because they will be addressed through the normal course of business.

Subsequently the group voted on the strategies within the three categories. The strategies that received at least one vote were included in a spreadsheet that summarizes this exercise.

After this exercise was complete, the City of Long Beach Finance Director summarized where the city receives its General Fund monies from and how the city spends its revenues. Based on the information about the city's finances, the groups separated the most popular strategies in each element. These were carried forward and the most appropriate funding sources were identified for each strategy. This list of top issues in each category and recommended funding sources are described below. Though this chart is limited to the top issues, a similar exercise could be conducted for the remaining strategies that were identified during the retreat as important, and were not carried forward into the spreadsheet below.

Note that funding sources indicated in the tables are preliminary. Other types of funding may be used if determined to be appropriate at the time of the project. Also, the listing of strategies in this section only indicates the desire at this time to carry out the actions described herein. However, the City is in no way obligated to carry out all projects listed in these Implementation Strategies or within the Plan, or required to commence any projects within the time frame identified for each strategy. The City is also not limited to only those projects identified at this time.

				0-2	years					
		GENERA	L FUND		PF	ROJECT S	PECIFIC	;		
Strategies	GENERAL OBLIGA- TION BONDS	REVENUE BONDS	FEES/ LICENSE	TAXES	LOCAL IMPROVE- MENT DISTRICT	GRANTS	LOANS	DONA- TIONS	TOOLS	KEY ROLE
<u>Urban Form 1-4-c</u> Encourage development at gateway locations that will provide a good first impression of the city.	Х			х		×		х	ZONING; STREET AND SITE DEVELOPMENT STANDARDS	COMMUNITY DEVELOPMENT
<u>Land Use 2-3-b</u> Plan for a variety of residential densities.			Х	х					ZONING; INCENTIVES	COMMUNITY DEVELOPMENT
Environment 4-1-f. Consider public health and safety impacts from potential natural disasters such as earthquakes and tsunamis in the location and design of future land use activities. Consider the possible development of "vertical" evacuation facilities to provide refuge for community residents and visitors from tsunamis.	х		х			х	х		CAPITAL IMPROVEMENT PLANNING AND FUNDING; SITE DEVELOPMENT STANDARDS	ADMINISTRATION COMMUNITY DEVELOPMENT PUBLIC SAFETY
Parks & Open Space 5-7-a Create a citizens advisory panel to work with and advise the City Council and Mayor on desired new or improved facilities and the financial strategy to accomplish Park, Open Space and Recreation goals.				х					PUBLIC OUTREACH	COMMUNITY DEVELOPMENT ADMINISTRATION FINANCE, PARKS
Mobility 6-3-f Install signage directing traffic to alternate routes around downtown streets in order to relieve traffic congestion			Х	х		Х			CAPITAL IMPROVEMENT PROGRAM; WAYFINDING PLAN AND DESIGN STANDARDS	PUBLIC WORKS COMMUNITY DEVELOPMENT
Utilities 8-1-a Prepare and maintain a Capital Improvement Plan.			Х						CAPITAL PLANNING; BUDGETING	ADMINISTRATION PUBLIC WORKS

<u>Utilities 8-1-e</u> Prepare and implement a Water Master Plan	Х	Х	Х	Х		UTILITY PLANNING; DEVELOPMENT STANDARDS	PUBLIC WORKS ADMINISTRATION
<u>Utilities 8-1-f</u> Prepare and implement at Wastewater Master Plan	Х	Х	×	×		UTILITY PLANNING; DEVELOPMENT STANDARDS	PUBLIC WORKS ADMINISTRATION
<u>Utilities 8-1-g</u> Prepare and implement a Stormwater Management	Х	х	×	Х		UTILITY PLANNING; DEVELOPMENT STANDARDS	PUBLIC WORKS ADMINISTRATION
Economic Development 9-4-e Within the designated resort areas, protect itinerant lodging from conversion to long-term uses in order to continue meeting the bed-base needs of tourism.						ZONING; INCENTIVES	COMMUNITY DEVELOPMENT

				2-5	years					
		GENERA	L FUND		PR	OJECT S	PECIFIC	;		
Strategies	GENERAL OBLIGA- TION BONDS	REVENUE BONDS	FEES/ LICENSE	TAXES	LOCAL IMPROVE- MENT DISTRICT	GRANTS	LOANS	DONA- TIONS	TOOLS	KEY ROLE
Housing 3-1-c Encourage housing typologies such as row houses, townhouses and small-lot cottages in medium- and high-density zone districts.									ZONING; INCENTIVES	COMMUNITY DEVELOPMENT
Environment 4-2-a Allow public access to the shoreline dune complex and associated wetlands for scientific, educational and recreational use, provided the public access trails are carefully sited; sensitive habitats and species are protected; and hydrologic integrity of the system is maintained (See also Mobility 6-4-a)			×	Х		х			CAPITAL IMPROVEMENT; FUTURE TRANSPORTATION PLAN; STREET STANDARDS	COMMUNITY DEVELOPMENT PARKS

Environment 4-2-b When appropriate, develop a habitat management plans to protect and enhance the ecological functions of the shoreline dune complex with particular emphasis on the publicly-owned dune areas in the shoreline conservancy zones and management of shore pines.				х		х		x	PARK PLANNING; DEVELOPMENT REVIEW	COMMUNITY DEVELOPMENT PARKS
Parks & Open Space 5-4-b Develop a variety of trail types that can be utilized in different site conditions to promote an extensive and varied trail system. (see also Mobility 6.4.a)	Х			Х		Х	X	Х	PARK PLANNING; CAPITAL IMPROVEMENT	PARKS
Parks & Open Space 5-6-b Consider developing a multi-purpose Community Center that can accommodate both active and passive recreation programs as well as other community functions (see also Capital Facilities 7-2-c)	Х	×	x	х		X	Х	x	CAPITAL IMPROVEMENT; FACILITY PLANNING	ADMINISTRATION COMMUNITY DEVELOPMENT PARKS
Utilities 8-1-d Maintain water and wastewater facilities with capacities that are adequate to serve the resident and visitor population of the City's service area.		Х	Х		Х	Х	Х		CAPITAL IMPROVEMENT	PUBLIC WORKS
<u>Utilities 8-3-f</u> Under-ground utilities where feasible to limit the potential for outages and to protect views. All utilities in new development should be underground.			X	X	X	Х			CAPITAL IMPROVEMENT; DEVELOPMENT STANDARDS; INCENTIVES	PUBLIC WORKS COMMUNITY DEVELOPMENT
Economic Development 9-4-b Work to reduce the seasonal nature of the local economy.			Х	Х		Х			ADVERTISING; MARKETING	ADMINISTRATION ECONOMIC DEVELOPMENT
Economic Development 9-5-c Identify target industries and businesses that should be encouraged to locate in Long Beach and the surrounding area.			Х	х		Х			MARKETING; ADVERTISING; INCENTIVES	ADMINISTRATION ECONOMIC DEVELOPMENT

				5+ :	years					
		GENERA	L FUND		PR	OJECT S	PECIFIC	:		
Strategies	GENERAL OBLIGA- TION BONDS	REVENUE BONDS	FEES/ LICENSE	TAXES	LOCAL IMPROVE- MENT DISTRICT	GRANTS	LOANS	DONA- TIONS	TOOLS	KEY ROLE
<u>Urban Form 1-4-a</u> Identify, zone and obtain lands for future facilities including parks, a civic center, a community center, parking, pavilion and other public amenities. (see also Land Use 2-9-a)	Х			Х		Х	Х	Х	FACILITY PLANNING; CAPITAL IMPROVEMENTS; ZONING	ADMINISTRATION COMMUNITY DEVELOPMENT FINANCE, PARKS
Parks & Opens Space 4-1-e Seek to expand open space and recreational opportunities by connecting the shoreline dune complex by a series of walking trails to the wetlands and drainage areas east of the city. (see also Mobility 5-4-f)	Х			Х		X	Х		TRAIL MASTER PLAN, CAPITAL IMPROVEMENT, FUTURE TRANSPORTATION PLAN	PARKS, COMMUNITY DEVELOPMENT
Parks & Open Space 5-6-c Recognize the need for park facilities oriented towards residents and visitors with special needs.			Х	X		Х	Х		PARK DESIGN AND STANDARDS	PARKS
Mobility 6-3-a Develop street and traffic control improvements to relieve traffic congestion at the Pacific Avenue and Bolstad Avenue intersection and to resolve conflicts at the intersection of Bolstad Avenue and Ocean Beach Boulevard.				X		Х	X		CAPITAL IMPROVEMENT PROGRAM	COMMUNITY DEVELOPMENT STREETS PUBLIC SAFETY
Mobility 6-3-c Maximize downtown parking on the back lots of properties adjacent to Pacific and on-street within a block of Pacific Avenue.			х	Х	х		х		ZONING REVISION; INCENTIVES	COMMUNITY DEVELOPMENT STREETS

Mobility 6-3-d Encourage the use of off- street public parking areas by creating attractive, inviting pedestrian connections from the parking lots to Pacific Avenue, and providing signage directing motorists to the parking lots.		х	x	х	х	x	DOWNTOWN MASTER PLAN; ZONING REVISIONS; CAPITAL IMPROVEMENT	COMMUNITY DEVELOPMENT STREETS
Economic Development 9-4-a Diversify the local economy so it is not as reliant on tourism, and so there is a broader range of job opportunities.			Х				MARKETING; ADVERTISING; INCENTIVES	ECONOMIC DEVELOPMENT COMMUNITY DEVELOPMENT

Long Beach Revenue Sources and Distribution

Long Beach General Fund revenues are from a number of sources. Broadly speaking they are:

- Taxes (Property, Sales, Gambling, Business & Occupation Taxes, etc.)
- Licenses and Permits (Business Licenses, Building Permits Long Beach and Ilwaco, Variances etc)
- Intergovernmental Revenue (Ilwaco Court Contract, Liquor Excise Taxes, Liquor Board Profits etc.)
- User Fees (Law Library, Fire protection services etc.)
- Fines and Forfeits (Parking, DUI, Court Costs Recoupment, non-traffic infractions, etc.)
- Miscellaneous (Interest, building rental, etc.)

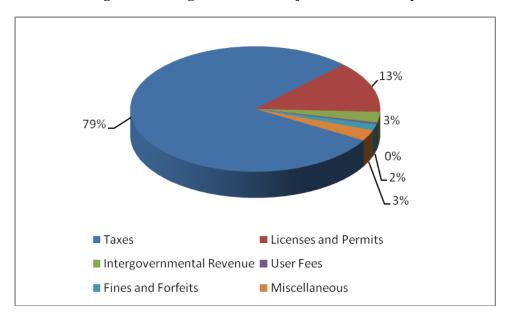


Figure I-1: Long Beach 2007 Projected Revenues By Source

In addition to the above sources, the city could also explore other revenue sources such as grants, general obligation bonds and loans to supplement the General Fund Budget.

Long Beach also sets aside revenues for

- Current Expense Sinking Funds
- Capital Projects Fund (Real Estate Excise Taxes)
- Law Enforcement Funds

- Fire Protection Funds
- Street Fund (USDA, Motor Vehicle Fuel Tax, WSDOT, LID Improvements and Investment Interest)
- Convention Center Funds
- Capital Improvement Funds (B&O tax, Penalties and Interests, Investment Interest)
- Police Sinking Funds
- Water/Sewer Funds (Business Taxes, Water Receipts, Sewer Receipts)
- Water Construction Fund (PWTF Loan, State Grant, SRF Loan, Water Connections, Investment Interest)
- Sewer Construction Fund (Sewer Connections, PWTF Loan, WS SPCRF Loan, CTED Grant, DOE Loan)
- Water-Sewer Equipment Fund
- Water-Sewer Sinking Fund
- Stormwater Utility Funds (Storm Drainage Receipts, Storm Utility Connections)

Financing Options for Public Programs and Capital Improvements

1. General Obligation Bonds

General Obligation Bonds (GO) are a low-risk debt instrument by which municipalities can raise funds for public projects that typically benefit the entire community but which in and of itself may not generate any revenue (such as roads, parks, equipment and so on). Since the bonds are backed by the full faith and credit of the municipality, these are perceived as low-risk investments and cities can purchase these at relatively low interest rates. Cities typically use some kind of tax mechanism to pay off the bonds such as sales or property taxes. Occasionally a city may use fees, such as license fees, to pay off the interest or principal of the bond. While defaults are rare, bondholders could make a legal claim on the city's general revenue should the city fail to repay the bond. Most communities do not borrow to their full legal capacity as it may impact negatively on their credit rating and increase the interest rates at which the debt is issued.

A. Councilmanic or Limited Tax GO Bonds

For these bonds a municipality's taxability is subject to a maximum rate. Generally, local governments use a portion of its existing property tax or some other revenue stream (such as its Real Estate Excise Taxes – see 4) Taxes) to pay off this bond; and is therefore tied to a statutory debt limit (2.5% of the City assessed valuation). In comparison to (b) below these are seen as more risky and therefore have higher interest rates. However, these do not require a public vote and can be issued by a vote of the city council.

APPLICATION: Capital improvement or any other purpose.

B. Unlimited Tax GO Bonds

In this case, a local government is required to establish a levy at whatever level is necessary to completely pay off the bond debt, including potential shortfalls from taxpayer delinquencies. This bond generally draws upon a property tax increase (or sales tax, etc.) for debt repayment. It however requires a 60% majority vote of residents and in Washington State, voter turnout must be at least 40 percent of the last general election.

APPLICATION: Only for capital improvements.

2. Revenue Bonds

Revenue bonds are used to finance projects that generate a line of revenue. While the bonds are not subject to statutory debt limits, their interest rates are higher than GO bonds since these bonds are not backed by the full faith and credit of the city. However, they provide a financing tool without exposing the municipality to its full debt limit. A general rule of thumb is that the anticipated income should be 1.25 times the debt service requirement.

APPLICATION: Self supporting enterprises such as water treatment plans, wastewater projects, airports, golf courses, parking garages, toll roads and bridges.

3. Fees

Fees offer a one-time payment option to offset the costs of offsite improvements generated by new projects. In many cases, the offsite improvements are requested directly by each new development and are offset by fees-in-lieu of payment programs.

A. Impact Fees

Impact fees offer a mechanism to raise funds for the construction of capital facilities or other improvements beyond the limits of the development, yet

contributing to the development's success. In Washington State a CIP is required for fee imposition.

APPLICATION: Parks, affordable housing, parking, school facilities, fire protection, public streets etc.

B. Hook Up Fees

These are one-time fees assessed when new developments seek connection to public utilities. These fees are tied to each utility and help defray costs for maintaining and expanding the systems.

APPLICATION: Sewer, water, stormwater connections.

C. Licensing Fees

Licensing fees are generally assessed on an annual basis. They can be applied to a number of sectors, but are generally mostly used for licensing the operation of certain businesses within city limits. Some cities also have rigorous pet licensing policies.

APPLICATION: Businesses, pets etc.

D. Building Permit Fees

Developers and property owners are assessed a fee when they seek a building permit from a city. These are used to defray the administrative costs of reviewing a project. Generally these are applied either on a sliding scale, based on a project's total development costs, or on a per-unit basis (square footage or number of dwelling units).

APPLICATION: New construction, additions, demolition and some renovations.

E. Document Recording Fee

County auditors are required to charge a \$10 surcharge on recording fees for recordings of real property documents, but not to assignments of previously recorded deeds of trust. County Auditors may retain up to 5 percent of collected funds for administration. Sixty percent of the remaining funds are retained by the county and must be used by the county and its cities for very low-income housing projects. These funds cannot be used for new housing if the vacancy rate for available low-income housing rises above 10 percent. The remaining 40 percent of the revenue is deposited monthly with the State Treasurer in the Washington Housing Trust Account. The Office of Community Trade and Economic Development is required to develop

guidelines for the use of funds to support building operation and maintenance costs of extremely low-income housing projects. (SHB 2060) Pacific County and the 4 incorporated cities have assigned responsibility for decisions regarding expenditure of these funds to the Joint Pacific County Housing Authority.

4. Taxes

A. Property Tax

This is Long Beach's primary source of revenue. State law requires that county assessors appraise property at 100 percent of its true and fair market value in money, according to the highest and best use of the property. Fair market value or true value is the amount that a willing and unobligated buyer is willing to pay a willing and unobligated seller. Various taxing districts, including the state and local jurisdictions, levy property tax. The individual taxing districts determine the amount of money needed and the county assessor calculates the tax rate necessary to raise that money. The amount of property tax due on an individual property is based on the combination of tax rates and the assessed value of the property. All property taxes are paid to the county treasurer's office where the property is located. A portion of total property taxes paid are redirected back to Long Beach's General Fund.

APPLICATION: General Fund, Street Fund; portion may be used towards loan or dedicated bond repayment

B. Sales Tax

Retail sales tax is Washington's principal tax source. Businesses making retail sales in Washington collect sales tax from their customer. Generally, a retail sale is the sale of tangible personal property. It is also the sale of services such as installation, repair, cleaning, altering, improving, construction, and decorating. Other services include improving real or personal property, amusement and recreational activities, lawn maintenance, and physical fitness activities. Retail sales tax includes the state and local components of the tax. Sales tax amounts collected are considered trust funds and must be remitted to the Department of Revenue. Some cities have an additional sales tax levy that is dedicated to a specific expenditure.

APPLICATION: General Fund; portion may be used towards loan or dedicated bond repayment

C. Motor Vehicle Tax

Effective July 1, 2003, all retail sales, leases and transfers of motor vehicles are subject to the additional sales tax (or use tax) of three-tenths of one percent (0.3%). The tax is collected by the vendor at the time of purchase and submitted by the vendor on the excise tax return. If sales tax was not paid at the time of purchase, use tax applies at the time the vehicle is registered with the Department of Licensing. This would occur if a vehicle was purchased from a private party or if it was purchased outside of Washington. The rate is .003 of the net price paid by the purchaser. This tax is in addition to other applicable taxes.

APPLICATION: The funds are used to finance transportation improvements.

D. Lodging Tax

The Lodging Tax is an excise (sales) tax authorized by State law in RCW 67.28, Public Stadium, Convention, Arts and Tourism Facilities on overnight guests of lodging establishments such as hotels, motels, bed and breakfast facilities, or camp grounds. Lodging tax proceeds may only be used for certain activities, such as advertising and promotion, and tourism-related facilities.

APPLICATION: Lodging Tax Fund; advertising, supporting tourism facilities.

E. Business and Occupation Tax

The state B&O tax is a gross receipts tax. It is measured on the value of products, gross proceeds of sale, or gross income of the business. Washington, unlike many other states, does not have an income tax. Washington's B&O tax is calculated on the **gross** income from activities. This means there are no deductions from the B&O tax for labor, materials, taxes, or other costs of doing business. The B&O tax rate varies by classification and is paid on the excise tax return or by electronic filing. Credits are amounts that have been paid to the Department of Revenue and are not due or are granted by the Legislature for a specific purpose. Credits are subtracted from the B&O tax due on your excise tax return. Credit definitions provide detailed instructions for reporting credits on the tax return.

The major B&O tax credits are:

- Rural County B&O Credit for New Employees
- High Technology B&O Tax Credit
- Small Business B&O Tax Credit

Multiple Activities Tax Credit (MATC)

APPLICATION: General Fund

F. Real Estate Excise Tax

The State of Washington is authorized to levy a real estate excise tax on all sales of real estate, measured by the full selling price, including the amount of any liens, mortgages and other debts given to secure the purchase at a rate of 1.28 percent. (RCW 82.45.060) A locally-imposed tax is also authorized. However, the rate at which it can be levied and the uses to which it may be put differs by city or county size and whether the city or county is planning under the Growth Management Act (GMA). All cities and counties may levy a quarter percent tax (described as "the first quarter percent of the real estate excise tax" or "REET 1"). (RCW 82.46.010) Cities and counties that are planning under GMA have the authority to levy a second quarter percent tax (REET 2). (RCW 82.46.035(2)) Note that this statute specifies that if a county is required to plan under GMA, or if a city is located in such a county, the tax may be levied by a vote of the legislative body. If, however, the county chooses to plan under GMA, the tax must be approved by a majority of the voters. (Source: MRSC) Long Beach currently does not use this taxation program.

APPLICATION: Capital Improvements; streets, parks, sewers, water mains, swimming pools etc.

5. Local Improvement Districts

These are commonly used to pay for capital improvements within a designated area of the city, such as street lights, streetscape and signage improvements, water and sewer system upgrades or expansion or undergrounding power lines. A Local Improvement District or LID may be formed through the petition of property owners through Council resolution. LID fees are assessed only on those properties directly benefiting from the improvements. Since these are not backed by the credit of the city, bondholders cannot collect from the city's general fund revenues unless stipulated by the city.

APPLICATION: Public streetscape or utility improvements. (Could be referred to as Business Improvement Districts or Transportation Improvement Districts)

6. Grants

There are numerous grant programs available to cities for programs and capital improvements. State agencies that provide grants include the Department of Community, Trade and Economic Development, the Department of Transportation and the Department of Ecology. Federal agencies include the Department of Housing and Urban Development, Department of Agriculture and the Federal Highways Administration. Private foundations may also provide grants.

A. Community Development Block Grant (Source: CTED)

PLANNING ONLY: Community Development Block Grant (CDBG) Planning-Only Grants assist Washington State small cities, towns and counties. This program is funded by the U.S. Department of Housing and Urban Development (HUD).

APPLICATION: Planning efforts that principally benefit low- and moderate-income persons.

GENERAL PURPOSE: General Purpose CDBG grants are available annually through a competitive application process to help small cities, towns, and counties carry out community and economic development projects that benefit low- and moderate-income persons. Eligible applicants are non-entitlement cities and towns with less than 50,000 in population or counties with less than 200,000 in population. The grant provides funding for projects or combinations of projects, such as:

- Public facilities such as water, wastewater, storm sewer and streets;
- Community facilities, such as community centers, health care facilities and child care facilities;
- Economic development, such as revolving loan funds, infrastructure and incubators;
- Barrier removal for handicap accessibility.

B. USDA Rural Development Grant

The Rural Housing Community Facilities Program offers direct and guaranteed loans and grants designed to finance and facilitate the development of over 80 different types of essential community facilities serving rural areas including but are not limited to, hospitals, elderly care facilities, child care centers, fire and rescue stations, vocational and medical rehabilitation centers, schools, and public transportation infrastructure. The Housing and Community Facilities Loan Guarantee Programs guarantees up to 90% of the

amount of a loan from a private lender to a public or nonprofit entity to be used for the construction of an essential community facility. USDA makes direct loans to nonprofit and public entities for the construction of essential facilities. Most loans are made at below-market interest rates and are aimed at serving financially challenged rural areas. USDA also makes loans and grants to finance rental and cooperatively owned multi-family housing of modest size, design and cost for very low-, low-, and moderate-income households. Special emphasis is placed on needs of the elderly and handicapped.

APPLICATION: Water and sewer development, business loan guarantees, telecommunications, electricity loans and grants, public safety building construction, rescue equipment, libraries, town halls and access to broadband. Other areas of funding are affordable housing, the provision of clean drinking water, and for community facilities, including purchase of land needed for construction of the facility, necessary professional fees, and equipment and operating costs.

C. Energy and Environment Block Grant

The Energy and Environment Block Grant program intends to reduce fossilfuel emission and total energy use, as well as improve energy efficiency and conservation in the transportation and building sectors. About 28 percent of the funds are allocated to the states such that each state will receive at least 1.25 percent, with the remaining amount distributed among states by population. At least 60 percent of the funds received by each state are to be used to provide sub-grants to cities and counties that do not meet population qualifications to receive grants directly.

APPLICATION: Planning and building; incentives; efficient transportation programs; updating building codes and inspection procedures; installing renewable energy technology on or in government buildings; replacing traffic signals and street lighting with energy-efficient technology; energy audits; conservation programs; retrofitting to increase energy efficiency; smartgrowth planning and zoning; and technologies to capture greenhouse gases.

D. Housing Trust Fund

The Housing Trust Fund is created under RCW 43.185.030, and includes revenue established under statute, legislative appropriations, private contributions, repayment of loans, and all other sources.

APPLICATION: Assist low and very low-income citizens in meeting their basic housing needs.

7. Loans

A. Public Works Trust Fund

Repair or reconstruction of roads, sanitary sewer, domestic water, bridges, storm sewer, solid waste/recycling.

B. Drinking Water State Revolving Fund (PWD)

Improve drinking water systems and protect public health for both public and privately owned systems.

C. Community Economic Revitalization Board

The Local Infrastructure Financing Tool Program (LIFT) provides on a limited basis a new public infrastructure financing mechanism for selected local governments – three selected by the Legislature and others competitively selected by the Community Economic Revitalization Board (CERB). The program allows each selected local government to take advantage of tax revenue generated by private investment in a revenue development area (RDA) to help finance the cost of public infrastructure improvements that encourage economic development and redevelopment in that area. The 2007 Legislature passed Second Substitute House Bill (SSHB) 1277 that amended the LIFT statute, providing greater clarity on tax calculations and providing for a round of funding to be awarded in 2008.

APPLICATION:

- Road construction and maintenance:
- Water and sewer system construction and improvements;
- Sidewalks, traffic controls, and streetlights;
- Parking, terminal, and dock facilities;
- Transit authority park and ride facilities;
- Park facilities and recreational areas;
- Storm water and drainage management systems; and
- Affordable housing as defined in RCW 43.63A.510.

D. CENTENNIAL CLEAN WATER FUND (Department of Ecology)

The Water Quality Account is financed primarily from tobacco tax revenues and may also be supplemented from the State General Fund, subject to legislative appropriation. The Centennial Clean Water Fund (Centennial) is one of the programs funded by the account, and is authorized by Chapter 70.146 of the Revised Code of Washington (RCW). The Centennial fund provides grants and low-interest loans to local governments and Indian tribes for water pollution control facilities and water pollution control activities designed to prevent and control water pollution to our state's surface and ground water.

APPLICATION: The design, acquisition, construction, and improvement of water pollution control facilities and water pollution control related activities.

E. Water Pollution and Control Revolving Fund (Department of Ecology)

The Washington State Water Pollution Control Revolving Fund (SRF) provides low-interest loans to local governments for projects that improve and protect the state's water quality. The State Legislature passed a statute in 1988 (RCW 90.50A, Water Pollution Control Facilities – Federal Capitalization Grants), which created Washington State's SRF Program. Funding for Washington's SRF Program includes federal grants, a 20 percent state match composed of Water Quality Account funds, monies from loan principal and interest repayment, and interest earned by the State Treasurer's office on investments of the loan principal and interest repayments.

APPLICATION: The SRF provides low-cost financing or refinancing of eligible costs for projects including publicly owned wastewater treatment facilities, nonpoint source pollution control projects, and comprehensive estuary conservation and management programs.

8. Donations

The city on occasions might seek private donations to fund activities or capital improvements that may be necessary for the larger community. These might be in the form of in-kind donations, dedication of conservation land trusts, or direct monetary donations.

J. Reference Tables

Figure J-1: Projections of Total Resident Population for the Growth Management Act

INTERMEDIATE SERIES: 2000 TO 2025 (RELEASED JANUARY 2002)

			,		· ·	
	2000	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>
State	5,894,121	6,233,345	6,648,112	7,096,501	7,545,269	7,975,471
Adams	16,428	17,458	18,502	19,724	20,919	22,063
Asotin	20,551	21,466	22,582	23,569	24,650	25,671
Benton	142,475	151,522	161,236	169,528	177,388	184,818
Chelan	66,616	71,169	75,993	81,056	85,864	90,461
Clallam	64,179	64,969	67,754	70,769	74,349	77,749
Clark	345,238	391,264	432,479	473,674	509,876	544,809
Columbia	4,064	3,914	4,000	4,150	4,126	4,092
Cowlitz	92,948	98,764	107,903	117,163	126,797	136,114
Douglas	32,603	36,257	39,196	42,302	44,920	47,428
Ferry	7,260	7,901	8,384	8,827	9,429	10,008
Franklin	49,347	52,642	56,392	60,216	64,687	68,997
Garfield	2,397	2,436	2,510	2,596	2,668	2,734
Grant	74,698	82,397	88,331	92,806	95,715	98,395
Grays Harbor	67,194	66,490	68,878	71,761	74,605	77,269
Island	71,558	74,738	80,650	87,416	94,365	101,079
Jefferson	26,299	28,308	30,892	34,067	37,483	40,807
King	1,737,034	1,786,803	1,861,042	1,940,385	2,018,824	2,092,390
Kitsap	231,969	236,403	257,841	281,883	307,113	331,571
Kittitas	33,362	34,314	36,742	39,451	41,776	43,999
Klickitat	19,161	20,338	21,626	23,071	24,493	25,855
Lewis	68,600	73,005	77,493	81,251	86,070	90,678
Lincoln	10,184	10,095	10,386	11,004	11,918	12,802
Mason	49,405	53,789	58,604	64,007	69,635	75,088
Okanogan	39,564	41,458	44,061	46,315	47,920	49,410
Pacific	20,984	20,957	21,257	21,725	22,228	22,678
Pend Oreille	11,732	12,679	13,674	14,711	15,706	16,662
Pierce	700,820	740,838	788,580	840,557	892,454	942,157
San Juan	14,077	15,480	17,316	19,168	20,877	22,534
Skagit	102,979	113,136	123,807	135,717	150,449	164,797
Skamania	9,872	10,483	11,068	11,731	12,344	12,927
Snohomish	606,024	666,735	728,957	793,720	862,599	929,314
Spokane	417,939	441,068	466,417	496,981	529,958	561,627
Stevens	40,066	42,105	46,585	52,102	58,154	64,057
Thurston	207,355	234,053	258,687	286,449	312,029	336,825
Wahkiakum	3,824	3,906	4,169	4,406	4,745	5,072
Walla Walla	55,180	57,475	60,030	62,398	64,856	67,158
Whatcom	166,814	180,463	195,504	213,246	230,228	246,636
Whitman	40,740	40,445	41,149	42,342	43,651	44,856
Yakima	222,581	225,622	237,435	254,257	269,401	283,884

Source: OFM/Forecasting 1/25/02

Figure J-2: Residential Home Sales in Long Beach Washington (1/1/06-10/27/06)

ML#	Address	SF	Price
4010627	1407 S IDAHO	884	\$66.600
6037779	206 24TH ST	930	\$80.000
5028459	1700 N OREGON	1.056	\$92,000
N26139369	322 11TH ST, N	1,248	\$92,000
5062086	311 7TH SE	640	\$95.000
5061917	2407 N WASHINGTON	1,779	\$100.000
6033781	110 NE 16TH ST	1,440	\$117.000
6063228	323 S 8TH ST	192	\$120,000
6007873	1705 OREGON ST	884	\$120,000
6017489	309 E 11TH ST	736	\$126,000
5075400	106 8TH ST SE	606	\$129,000
N25173570	13111 SANDRIDGE	1,440	\$130,000
N26086939	1502 177TH ST	1,100	\$135,000
N25124829	18901 SANDRIDGE RD	1,200	\$136,500
6031245	1212 IDAHO AVE	992	\$149,500
6032004	601 S WASHINGTON ST	1,221	\$150,000
6045545	510 WASHINGTON AVE	1,221	\$157,000
6013124	5305 SANDRIDGE RD.	1,348	\$160.00
6037062	1101 CALIFORNIA	1,106	\$166.00
6024776	306 NE 6TH ST	1.012	\$167,00
5092317	208 17TH ST	1,876	\$170.00
6003267	1617 S WASHINGTON ST	1,188	\$171.00
N25146602	311 SID SNYDER DR	1,148	\$172,00
5054339	210 NE 6TH ST	1,384	\$175.00
6064846	2401 66TH PL	1.095	\$180.000
6069334	404 N WASHINGTON ST	2,230	\$192,50
6002917	1315 N BOULEVARD	1,424	\$195.00
N26142193	504 N PACIFIC WAY	1,000	\$200.00
5031326	315 SID SNYDER DR	1.848	\$220.00
6013796	6703 V PL	1.920	\$223,50
N25179145	803 OREGON AVE, S	NA	\$225.00
6007042	2604 SEACREST AVE	1.639	\$229.50
6007857	2812 SEACREST LN	1,500	\$260.00
6006430	2608 SEACREST LN	1.500	\$270.00
6007868	2704 SEACREST LN	1.500	\$282,00
6048821	1004 OREGON ST	2,996	\$298.00
N25181487	611 WASHINGTON AVE	NA	\$299.00
6012615	SEACREST LN	2,000	\$340.50
6052979	312 SW 17TH ST	1.920	\$344,00
5007466	1205 168 TH	3,850	\$350.00
6034606	201 SE 19TH ST	3.200	\$395.00
5062010	317 5TH ST. N	2,634	\$532.50
3002010	31/ 3111 S1. N	AVERAGE	\$195,55
		MEDIAN	\$170,50
		COUNT	42

This list was compiled from the RMLS and NWMLS reports from 1/1/06 to 10/27/06; RMLS was used as the primary source, supplemented by NWMLS listings, crosschecked for duplicates; ML# with no letter indicates a RMLS listing, while N indicates a NWMLS listing.

Figure J-3: Existing Plan -- Buildable Lands Capacity Analysis

CITY OF LONG BEACH, WA, JANUARY 2007

Current Zoning	Zoning Description	Vacant Land	Coastal Wet- lands	NWI Wet- lands*	Wet- land Buffers	Avail- able Land	- 22% for Parks, Roads etc	- 25% for Market factor	Density	Total :	Homes % Permanent Dwelling^^			Resi Popul Projec	
		acres	acres	acres	acres	acres	acres	acres	du/acre	d	lu	d	u	pers	sons
										LOW	HIGH	LOW	HIGH	LOW	HIGH
C1	Commercial District	12.76		0.42	0.87	11.48									
L1	Light Industrial District^	9.32		2.35	1.31	5.67									
	Subtotal	22.08		2.76	2.18	17.14									
OT	Old Town District	4.99			0.06	4.93									
OTW	Old Town West District	5.19	0.81		1.69	2.69									
	Subtotal	10.18	0.81		1.75	7.62									
R1	Single Family Residential	19.06		4.92	0.30	13.84	10.80	8.10	7	57	57	38	38	72	72
R1MH	Single Family Manufactured	28.13		7.85	1.58	18.71	14.59	10.94	7	77	77	51	51	98	98
R1R	Restricted Single Family Residential District	17.79		0.34	0.52	16.93	13.21	9.90	7	69	69	46	46	88	88
S1	Shoreline Single-family Residential District	52.50	8.91	0.03	17.68	25.87	20.18	15.14	4	61	61	41	41	77	77
	Subtotal	117.48	8.91	13.14	20.08	75.35	58.77	44.08		263	263	176	176	335	335
R2	Multi-family Residential District	3.80		0.18	0.41	3.21	2.51	1.88	7-13	13	24	9	16	17	31
S2	Shoreline Multi-family Residential District	45.76	7.95		9.25	28.56	22.28	16.71	4-9	67	150	45	101	85	191
	Subtotal	49.56	7.95	0.18	9.66	31.77	24.78	18.59		80	175	54	117	102	223
S3	Shoreline Resort District	15.58	3.99		5.96	5.63									
S3R	Shoreline Resort Restricted	37.49	4.05		7.99	25.44									
	Subtotal	53.07	8.05		13.95	31.08									
	TOTAL	252.37	25.72	16.08	47.61	162.96				343	438	230	293	437	558

^{* 50%} Reduction

^{**} Assumes 1.9 Persons Per Household (PPH)

[^] Includes underused industrially zoned property currently under County Ownership

[^] Based on an average rate of change 2% increase in owner occupied housing in Long Beach this assumes a rate of 67% occupied

Figure J-4: Proposed Plan -- Buildable Lands Capacity Analysis

CITY OF LONG BEACH, WA, FEBRUARY 2007

New Zoning	Zoning Description	City Zoning	Shore- line Zoning	Vacant Land (Inland)	Vacant Land (Shore)	Coastal Wet- lands	NWI Wet- lands*	Wet- land Buffers	Available Land	- 22% for Parks, Roads etc	- 25% for Market factor	Density	Total	Homes		manent lling^	Popu	ident dation ction**
				acres	acres	acres	acres	acres	acres	acres	acres	du/acre		du		lu		rsons
													LOW	HIGH	LOW	HIGH	LOW	HIGH
SFR	Single Family Residential	R1, R1MH		35.79			1.61	1.81	32.37	25.25	18.94	7	132	132	88	88	167	167
			R1R, S1		51.81	8.95	0.06	17.21	25.59	19.96	14.97	4	60	60	40	40	76	76
MDR	Medium Density Residential	R2		6.46			0.04	0.18	6.24	4.87	3.65	8-10	29	37	19	25	36	48
			S2		37.38	6.76		8.82	21.80	17.00	12.75	11-14	140	179	94	120	179	228
HDR	High Density Residential	R2		29.20			24.92	0.85	3.43	2.68	2.01	11-14	22	28	15	19	29	36
TOTAL	Residential Zones			71.45	89.19	15.71	26.63	28.87	89.43	69.76	52.32		383	436	256	292	487	555
RES	Resort		S3		0.16	0.01		0.01	0.14						•	•		
			S3R		50.63	8.06		13.98	28.58									
RC	Residential Commercial***	New		7.57			0.34	0.48	6.75	5.27	3.95		32	55	21	37	40	70
NC	Neighborhood Commercial	C1		6.49			0.49	0.39	5.61									
VC	Visitor Commercial	OT, OTW		11.03		0.81		1.75	8.47									
CI^^	Commercial/Light Industrial	C1, C2, LI		6.98			1.87	1.28	3.83									
P	Public	New		4.77			4.20	0.46	0.11									
REC	Parks, Recreation & Open Space	New																
			S4															
	Unknown^^^			0.71	6.07	1.04		1.42	4.32									
TOTAL	RESIDENTIAL		79.02	89.19	15.71	26.97	29.35	96.18	75.03	56.27		415	491	277	329	527	625	

^{* 50%} Reduction - Calculated in Available Land Column

^{**} Assumes 1.9 Persons Per Household (PPH)

^{***} Assumes 50% level of residential development

[^] Assumes 67% permanent dwellings, remainder second or vacation homes

[^] Includes currently underused, soon to be vacated industrially zoned land under County ownership

^{^^^} includes slivers, unimproved rights-of-way and otherwise not listed as having a use

Figure J-5: Buildable Lands Capacity Analysis

URBAN GROWTH AREA (NORTH ONLY)

New Zoning	Existing Zoning	Zoning Description	Vacant Land	NWI Wetlands*	Coastal Wetlands	Wetland Buffers	Available Land	- 25% for Parks, Roads etc	- 25% for Market factor	Density	Total :	Homes		manent lling^	Popu	ident llation ction**
			acres	acres	acres	acres	acres	acres	acres	du/acre	d	lu	C	lu	per	sons
											LOW	HIGH	LOW	HIGH	LOW	HIGH
SFR	R1, R1MH, R1R, S1	Single Family Residential	107.59	2.14	0.99	4.05	104.46	78.35	58.76	4-7	235	411	157	276	299	524
	TOTAL		107.59	2.14	0.99	4.05	104.46				235	411	157	276	299	524

^{* 50%} Reduction - Calculated in Available Land Column

^{**} Assumes 1.9 Persons Per Household (PPH)

[^] Assumes 67% permanent dwellings, remainder second or vacation homes

Figure J-6: Buildable Lands Capacity Analysis

URBAN GROWTH AREA (EAST ONLY)

New Zoning	Existing Zoning	Zoning Description	Vacant Land	NWI Wetlands*	Coastal Wetlands	Wetland Buffers	Available Land	- 25% for Parks, Roads etc	- 25% for Market factor	Density	Total Homes	% Permanent Dwelling^	Resident Population Projection**
			acres	acres	acres	acres	acres	acres	acres	du/acre	du		du
SFR	R1	Single Family Residential	80.24	67.44	N/A	4.88	7.92	5.94	4.46	7	31	21	40
REC	N/A	Parks, Recreation & Open Space	30.64	30.64	N/A	0.00	0.00	0.00	0.00	0	0	0	0
	TOTAL		110.88	98.08	N/A	4.88	7.92	5.94	4.46	7	31	21	40

^{* 50%} Reduction - Calculated in Available Land Column

^{**} Assumes 1.9 Persons Per Household (PPH)

[^] Assumes 67% permanent dwellings, remainder second or vacation homes

K. Glossary

A

Absorption Rate

The length of time it takes for a parcel of real estate to be sold or rented.

Accessory Dwelling Unit

A dwelling unit that has been added onto or created within a single family house. It could be also refer to a dwelling unit in a structure detached from the principal building located on the same lot and customarily incidental and subordinate to the principal building or use.

Alternative Energy

Energy that is of non-fossil fuel sources and often times renewable.

Anchors

Public facilities that become the focal point of socialization, services and communication. These can be libraries, parks, community centers, city hall, etc.

Annexation

The incorporation of land area into an existing community with a resulting change in the boundaries of that community.

Affordable Housing

Decent, quality housing that costs no more than 30% of a household's gross monthly income for rent/mortgage and utility payments.

Architectural Design Review Board

A board or commission designated by the City Council to review building plans and determine whether they conform to the standard outlined in either city codes (if form-based) or other any design guidelines (such as City of Long Beach Design Review Guidebook) and urban design plans.

Arterials

Streets that are relatively continuous, have relatively high traffic volumes, carry longer trips and have higher operating speeds.

Assisted Living Care

Residential stay option in which three or more unrelated individuals live together and are cared for.

B

 \mathbf{C}

Central Business District

The area of the City of Long Beach sometimes called "Old Town". The boundaries of the district are set out in the Land Use Plan.

Civic Center

A building or group of buildings housing government functions, such as city offices, library, public meeting rooms, etc., and that may be combined with other public serving facilities such as a community center.

City

The City of Long Beach.

Cluster

A design technique that concentrates buildings on a part of the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive features.

Coastal Village Theme

An architectural style that attempts to recreate the atmosphere associated with a turn-of-the-century seashore resort; also described as "early seashore.

Collectors

Streets that collect and distribute traffic between local roads and arterials.

Commercial Core

The primary area or concentration of commercial uses, also described as the Old Town District, bounded by 3rd Street N, 11th Street S, Ocean Beach Boulevard and Oregon Avenue.

Commercial Use

A land use activity that is associated with the sale and purchase of goods and services.

Community Center

A facility used for recreational, social, educational and cultural activities, providing space for public events and activities, such as conference and meeting space, theater, etc., and that may be combined with other public serving facilities such as a civic center.

Comprehensive Plan

A generalized, coordinated and long-range land use plan, intended to guide the growth or development of a community or region for a set period of time and that typically includes inventory and analytic sections leading to recommendations for the community's future land use, economic development, housing, recreation and open space, transportation, community facilities, utilities and community design, all related to the community's goals and objectives for these element.

Concurrency

When adequate capital facilities are available as development occurs.

Cottage Housing

A small, detached dwelling unit.

Cottage Industry

A home occupation that does not require retail sales or courier delivery services (as used in this plan).

Cottage Manufacturing Activities

A family-owned and -operated manufacturing business conducted in a residential or storefront unit and that generally excludes equipment or processes that create noise, vibration, glare, fumes, odors, or electrical interference detectable to the normal senses off the lot. Examples of Cottage Manufacturing Activities are: kite making, pottery studio, doll making, curios, painting studio, carving studio, etc.

Council

The city council of the City of Long Beach.

Condominiums

A building or group of buildings, in which dwelling units, offices, or floor area are owned individually; and the structure, common areas, and facilities are owned by all the owners on a proportional, undivided basis. Condominiums are a type of property ownership and are not a type of land use.

Critical Area

An area with environmental characteristics such as steep slopes, floodplain, soils classified as having high water tables, fault areas, estuaries, mature stands of native vegetation, aquifer recharge and discharge areas, wetlands and wetland transition areas, and habitat of endangered species.

Cultural Heritage

Community identity based on a unique historic background.

Cultural Resource

Cultural resources are objects, documents, or any part of the built environment that has significance in archeology, architecture, art and history. Cultural resources relate only to remains and sites associated with human activities and include the following:

- Prehistoric and ethnohistoric Native American sites
- Historic archaeological sites
- Historic buildings, structures, sites and objects
- Elements or areas of the natural landscape that have traditional cultural significance to the citizens of the City of Long Beach, Pacific County, the State of Washington, the Long Peninsula, the Lower Columbia region or the nation.

D

Density

A measure of the intensity of development, generally expressed in terms of dwelling units per acre or Floor Area Ratio (FAR).

Developer

A person who builds housing, commercial and industrial structures, etc.

Dwelling Unit

An enclosure containing sleeping, kitchen, and bathroom facilities designed for use as a residence.

\mathbf{E}

Easement

A grant of one or more of the property rights by the property owner to and/or for use by the public, a corporation, or another person or entity.

Edges

Marks the outer limits of a city; where the city is first or last experienced. Edges can be a combination of hard (roads or buildings) or soft (water bodies, parks, etc.) features.

Eco-tourism

Low impact, nature-oriented tourist activities that involve an interaction of groups of people with the environment and natural resources in an area.

Economic Generators

Large concentrations of commercial uses that help fortify local revenue. These are typically downtowns, neighborhood commercial areas, industrial areas, etc.

Environs

The unincorporated areas surrounding the city limits of the City of Long Beach.

\mathbf{F}

Floor Area Ratio

Representing the gross floor area of all buildings or structures on a lot divided by the total lot area.

G

Goal

A general statement that reflects a positive and realistic view of what could be or an ideal situation.

Government Meander Line

A line established by survey by the State of Washington in 1889, also referred to as the western upland boundary, and that is the eastern edge of the area subject to planning under the Shoreline Management Act.

Green Development

Type of development that is designed according to environmentally friendly and sustainable principles.

Greenhelt

An open area that may be cultivated or maintained in a natural state surrounding development or used as a buffer between land uses or to mark the edge of an urban or developed area.

Green Building

Development practices that increase the efficiency with which buildings use resources, including energy, water and materials, while reducing building impacts on human health and the environment, through better siting, design, construction, operation, maintenance and removal, throughout the compete building life cycle.

Green Street

A street designed to accommodate vehicles, pedestrians and bicyclists in a way that minimizes the amount of pavement, provides separation between vehicles and other users, and incorporates landscaping and design features to optimize handling of stormwater runoff.

Group homes

Unrelated individuals living together and being cared for in a residential facility.

Growth Management Act (GMA)

Adopted by the Washington State Legislature in 1990, the Act requires state and local governments to manage Washington's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing comprehensive plans and implementing them.

H

Hotel

A facility offering transient lodging accommodations to the general public and providing additional services, such as restaurants, meeting rooms, entertainment, and recreational facilities. Facilities of these types can also be referred to as Motel, Boarding House, Inn, Resort, Tourist Home, Guests Home, Bed and Breakfast.

Housing (see Residential Use)

I

Impervious Surface

A surface through which water cannot penetrate or penetrates very slowly, such as a roof, road, sidewalk, or paved parking lot.

Incompatible Use

A use that is incapable of existing in harmony with other uses situated in its immediate vicinity due to characteristics or impacts of that use, such as noise, traffic, hours of operation, glare, fumes, etc.

Incorporated

An area organized as a legal corporation. Long Beach is an incorporated city.

Industrial Use

Activities predominantly associated with manufacturing, assembling, processing, or storing of products.

Intensity (also Density)

The number of dwelling units per acre or floor area ratio (FAR).

J

K

L

Land Use

A general description of how land is occupied or utilized, i.e. commercial, single-family residential, multi-family residential, etc.

LEED

Leadership in Energy and Environmental Design; a third-party certification program and nationally accepted benchmark for the design, construction and operation of high performance green buildings.

Level of Service [LOS]

Defines the quality and quantity of service provided by a community's infrastructure and services. It can be defined for a wide range of facilities and services, including transportation, potable water, sewer, fire, parks and schools.

Light Industrial

Industrial and commercial uses that have the potential to create impacts from traffic, noise, light, fumes and vibration or require larger facilities than typically found in commercial zones, but are less intensive than major manufacturing, processing and other industrial uses.

Live-work

Mixed-use development that combines work and living space, either as a single unit or as two separate but attached uses, where the commercial use of the space may be more intense than typically found for a home occupation.

Local Roads

Streets that provide access to adjacent properties.

M

Manufactured Home

A dwelling unit composed of components assembled in a manufacturing plant and transported to the building site for final assembly on a permanent foundation. All manufactured homes must conform to the standards set forth in RCW 35A.63.145.

Mixed-Use

Land use type that allows development of a tract of land, building, or structure with a variety of complementary and integrated uses, such as, but not limited to, residential, office, manufacturing, retail, public, or entertainment, in a compact urban form.

Multi-family Housing

Housing designed to accommodate more than one household or family. Duplex, Triplex, Apartments, and Condominium structures are examples of multi-family housing.

N

Neighborhoods

Portions of the city that are well defined by boundaries and anchored by a central community facility or common characteristics.

0

Objective

A measurable statement of what must be accomplished to reach a goal.

Office Use (also see Commercial Use)

Land used primarily for conducting the affairs of a business, profession, service, industry, or government, or like activity. May include ancillary services for office workers, such as restaurant, coffee shop, newspaper or candy stand, and child-care facilities.

Open Space

Any parcel or area of land, essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment.

Ordinance

A municipally adopted law or regulation.

Owner Occupied

A dwelling that is the primary residence of the owner of that property.

P

Park

A tract of land, designated and used by the public for active and passive recreation.

Planned Unit Development

A fully contained development characterized by urban densities, uses and services and planned, operated and maintained as a single entity; it may include residential, commercial or mixed uses.

Policy

A statement that defines an action intended to achieve an objective.

Permeable Pavement

Type of pavement that allows the movement of water, air and other fluids through the paving material.

Public Facilities

Includes streets, roads, highways, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, government buildings, hospitals, and schools.

Public Land

Consists of public buildings and grounds and public facilities.

Public Utilities

Includes systems for the delivery of natural gas, electricity and telecommunications services, as well as water and sewer pipe lines.

Q

Ouasi Public

A use owned or operated by a non-profit, religious or similar institution, such as a hospital, school, library or museum.

R

Recreation

Activities associated with any form of play, amusement, or relaxation, such as games, sports, hobbies, hiking, biking, walking, etc. **Active Recreation** includes activities of a more formal nature, requiring equipment and taking place at prescribed places such as sports courts and ball fields. **Passive Recreation** involves relatively less energetic activities such as walking, sitting and picnicking, and more casual play or games.

Recreational Vehicle

A vehicular-type portable structure without permanent foundation that can be towed, hauled or driven and primarily designed as a temporary living accommodation for recreational, camping, and travel use and including, but not limited to, travel trailers, truck campers, camping trailers and self-propelled motor homes.

Rental

Property occupied by a tenant paying rent to an owner and no part of the rent is used to acquire equity in the property.

Rental Housing

Housing that is occupied by a tenant paying rent to an owner, with no part of the rent being used to acquire equity in the property.

Residential Use

Used in this plan for all types of dwelling units, such as single and multi-family housing, including manufactured homes.

Resort

Commercial activities that support tourism such as hotels, motels, shops, and restaurants.

Retail Use (also see Commercial Use)

Land use activity engaged in selling goods or merchandise to the general public for personal or household consumption and rendering services incidental to the sale of such goods.

Row House

An attached dwelling separated from others in a row by a vertical unpierced wall extending from basement to roof. (see Townhouse)

S

Seashore Conservation Line (SCL)

A line established by survey by the Washington State Parks and Recreation Department, conducted periodically and demarcating the location of the shoreline and used to denote upland ownership and building setback lines of certain ocean-front properties in the city at a particular point in time. See also Government Meander Line.

Seasonal Home

A dwelling unit not used as a principal residence that may be occupied by the owners for brief periods during the year; a seasonal home may also be described as a vacation home or second home.

Service Area

The area that serves and is served by transportation, utilities and capital facilities and systems.

Single-Family Residence

A building containing one dwelling unit that is not attached to any other dwelling and is surrounded by open space or yards.

Shall

A directive or requirement.

Should

An expectation or recommendation; similar in intent to "may," "consider," etc.

Structure

Anything constructed or erected.

Subdivision

The division of a tract of land into two or more lots, building sites, or other divisions for the purpose of sale or building development (whether immediate or future) and including all divisions of land involving the dedication of a new street or a change in existing streets.

Sustainable Development

A pattern of resource use that meets human needs while preserving the natural environment and that does not compromise the ability of futures generations to meet their own needs; it includes economic and social development and environmental protection, maintaining or enhancing economic opportunity while protecting and promoting environmental and community health and well-being.

\mathbf{T}

Townhouse

A one-family dwelling in a row of at least three such units in which each unit has its own front and rear access to the outside, no unit is located over another unit, and each unit is separated from any other unit by one or more vertical common fire-resistant walls.

Transfer of Development Rights

The removal of the right to develop or build, expressed in dwelling units per acre or floor area, from one property to another where such transfer is permitted; properties may be in the same or different zones.

IJ

Urban Growth Area

A defined region, not always coincidental with a municipality's corporate boundary, which defines the geographical limit of government-supplied public facilities and services. The establishment of an Urban Growth Area is subject to the requirements of the Growth Management Act.

Urban Growth Boundary

Boundary designating areas of existing and future urban growth that makes intensive use of land for residential, commercial, industrial development.



Vacant Land

(1) Land that is undeveloped and unused; (2) any nonresidential areas with significant amount of land not covered by nonstructural impervious surfaces; (3) land suitable for redevelopment or infill at higher densities; and (4) residential areas with lot sizes in excess of two acres where environmental factors permit higher densities.

Vacation Homes (see Seasonal Dwelling Unit)



Wayfinding

Refers to the ways in which people orient themselves in physical space and navigate from place to place.

X

Y

Z

Zoning

The delineation of districts and the establishment of regulations governing the use, placement, spacing, and size of land and buildings.

L. List of Figures

Map A-1: Annexation Update	A-3
Map A-2: Transportation Plan	A-5
Map A-3: Development Parameters Map	A-7
Map A-4: Parks and Open Space Plan	
Figure E-1: Existing Land Use Map (2006)	E-5
Figure E-2: Distribution of Land Use and Parcel Sizes (2006)	E-6
Figure E-3: Distribution by Current Zoning	E-7
Figure E-4: Zoning Map (2006)	E-8
Figure E-5: Housing Units by Structure Type	E-13
Figure E-6: Households of Long Beach by Household Income (1999)	E-15
Figure E-7: Wind Data, National Oceanic Atmospheric Association	E-17
Figure E-8: Wind Resources at 50 meters, Washington State	E-18
Figure E-9: Wind Speeds at 50 meters, Washington State	E-19
Figure E-10: City of Long Beach Interdunal Wetlands	E-21
Figure E-11: City of Long Beach, Wetland Types	E-22
Figure E-12: City of Long Beach, Existing Wetland Buffers	E-23
Figure E-13: City of Long Beach, Shoreline Jurisdiction Buildout Analysis	E-31
Figure E-14: Summary of Parks, Open Space and Recreation Resources	E-41
Figure E-15: Population Growth, 2000 to 2006	E-45
Figure E-16: Employment by Industry, Pacific County, 2004	E-46
Figure E-17: Employment Projections, Pacific County, 2004-2014	E-47
Figure E-18: Long Beach Estimated Employment	E-48
Figure E-19: Office Market Overview, City of Long Beach	E-49
Figure E-20: Average Household Expenditures, As a Percentage of Total Household	old
<u>Income</u>	E-50
Figure E-21:Long Beach Street Network	E-53
Figure E-22: Intersection Traffic Control (North Long Beach)	E-55
Figure E-23: Intersection Traffic Control (South Long Beach)	E-56
Figure E-24: City of Long Beach Functional Classifications	E-57
Figure E-25: Summer P.M. Peak Hour Traffic Volume	E-59
Figure E-26: Intersection Level of Service	E-60
Figure E-27: Peak Hour Intersection Level of Service (LOS)	E-61
Figure E-28: Long Beach Transit Service	E-63
Figure E-29: Southwest Washington General Aviation Airports	E-65
Figure E-30: Long Beach Sewer Service Area, 2008	E-70
Figure E-31: City of Long Beach Wastewater Treatment Plant Design Criteria	E-71
Figure E-32: Projected Resident Populations	
Figure E-33: Sewer Connection Fees	
Figure E-34: Sewer Rates in the City	E-75
Figure E-35: Long Beach Water Service Area	E-78
Figure E-36: Projected Population. Water Service Area	

Figure E-37: Water Production Requirements	E-81
Figure E-38: Water Storage Requirements	E-81
Figure E-39: Water System Capacity Limits	E-82
Figure E-40: Areas with Fire Flow Deficiencies	E-83
Figure E-41: Water Hookup Units	E-84
Figure E-42: Water Service Monthly Charge Inside City Limits	E-85
Figure E-43: Water Service Monthly Charge Outside City Limits	E-85
Figure E-44: Commodity Charge Inside City Limits	E-85
Figure E-45: Commodity Charge Outside City Limits	E-86
Figure E-46: Capital Improvement Schedule (Prioritized)	E-88
Figure E-47: Drainage Basins Description	
Figure E-48: Drainage Sub-Basins Description	E-90
Figure E-49: Precipitation Event Totals	E-91
Figure E-50: Projected Population	E-91
<u>Figure E-51: Capital Improvement Program Alternative 1</u>	E-93
Figure E-52: Stormwater Service Fees, Long Beach	E-94
Figure I-1: Long Beach 2007 Projected Revenues by Source	I-7
Figure J-1: Projections of Total Resident Population for the Growth Manageme	nt Act. J-1
Figure J-2: Residential Home Sales in Long Beach Washington (1/1/06-10/27/0	<u>)6)</u> J-2
<u>Figure J-3: Existing Plan Buildable Lands Capacity Analysis</u>	J-3
<u>Figure J-4: Proposed Plan Buildable Lands Capacity Analysis</u>	J-4
Figure J-5: Buildable Lands Capacity Analysis Urban Growth Areas (North C	<u> </u>
Figure J-6: Buildable Lands Capacity Analysis Urban Growth Areas (East Or	ılv)J-6